THE LAND OF ENCHANTMENT

LILIAN WHITING

Whiting, Lillian.
The land of enchantment.

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PICTURESQUE BRIGHT ANGEL TRAIL, GRAND CAÑON, ARIZONA

THE LAND OF ENCHANTMENT

From Pike's Peak to the Pacific

By LILIAN WHITING

Author of "The World Beautiful," "The Florence of Landor," "Boston Days," etc.

"*The Fairest enchants me;*
The Mighty commands me."

WITH ILLUSTRATIONS FROM PHOTOGRAPHS

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TO

THE UNFADING MEMORY

OF

MAJOR JOHN WESLEY POWELL

THE GREAT EXPLORER

Whose name is inseparably linked for all time with the "Titan of Chasms," the entire length of which he penetrated, revealing its weird and mysterious grandeur; whose fidelity to scientific survey has signally advanced the progress of our country; whose wise foresight in advocating water supplies for arid lands, whose heroism amid hardships and whose persistence of energy and noble purpose forever endear his name to every American and to all who revere the loftiest achievements of science,

These pages are inscribed by

LILIAN WHITING.

"The sun set, but not his hope;
Stars rose; his faith was earlier up."

"What 's life to me?
Where'er I look is fire, where'er I listen
Music; and where I tend bliss evermore."

BROWNING.

AUTHOR'S NOTE

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The Brunswick
Boston, October, 1906

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THE LAND OF ENCHANTMENT

THE LAND OF ENCHANTMENT

CHAPTER 1

WITH WESTERN STARS AND SUNSETS

"The sun, the moon, the stars, the seas, the hills, and the plains — Are not these, O Soul, the Vision of Him who reigns?"

TENNYSON

"It may be that the gulfs will wash us down."

TENNYSON

"My father's kingdom is so large that people perish with cold at one extremity whilst they are suffocated with heat at the other."

CYRUS TO XENOPHON

THE good American of the Twentieth century by no means defers going to Paris until he dies, but anticipates the joys of Paradise by making a familiarity with the French capital one of the consolations that tend to the alleviation of his enforced terrestrial sojourn. All Europe, indeed, has become the pleasure-ground of American tourists, a large proportion of whom fail to realize that in our own country there are enchanted regions in which the traveller feels that he has been caught up in the starry immensities and heard the words not lawful for man to utter. Within the limits of Colorado, New Mexico, Arizona, and Southern California there are

four centres of sublime and unparalleled scenic sublimity which stand alone and unrivalled in the world. Neither the Alps nor the Himalayas can offer any parallel to the phenomena of the mountain and desert systems of the Southwest as wrought by the march of ages, presenting unique and incomparable problems of scientific interest that defy solution, and which are inviting the constant study and increasing research of many among the most eminent specialists of the day in geology and metallurgy. The Pike's Peak region offers to the traveller not only the ascent of the stupendous Peak, but also the "Short Line" trip between Colorado Springs and Cripple Creek, which affords forty-five miles of marvellous mountain and cañon effects. The engineering problem of the ascent of St. Peter's Dome, — a huge mass of granite towering eleven thousand feet into the air, around which the steel track winds in terraces, glory after glory of view repeating itself from the ascending vistas as the train climbs the dizzy height, — the engineering problem that is here at once presented and solved, has attracted scientific attention all over the world as the most extraordinary achievement in mountain transportation. The Grand Cañon of the Colorado in Arizona, two days' journey from the Pike's Peak region, the Petrified Forests that lie also in Arizona, seventy-five miles beyond the border of New Mexico, and that Buried Star near Cañon Diablo, make up a group that travellers and scientists are beginning ardently to appreciate. Colorado, New

Mexico, Arizona, and Southern California offer, all in all, a landscape panorama that for grandeur, charm of climate, and rich and varied resources is unrivalled. Imagination falters before the resources of this region and the inducements it offers as a locality in which to live surrounded by perpetual beauty. The air is all exhilaration; the deep blue skies are a miracle of color by day, and a miracle of shining firmament by night; the land offers its richly varied returns in agriculture, fruit, mining, or grazing, according to the specific locality; the inhabitants represent the best quality of American life; the opportunities and advantages already offered and constantly increasing are greater than would at first be considered possible. This entire Southwest can only be accurately defined as the Land of Enchantment.

> "Yet all experience is an arch wherethro'
> Gleams that untravell'd world,"

exclaims Tennyson's Ulysses, and the wanderer under Western stars that hang, like blazing clusters of radiant light, midway in the air, cannot but feel that all these new experiences open to him vistas of untold significance and undreamed-of inspiration.

> "It may be we shall touch the Happy Isles,"

is the haunting refrain of his thoughts when, through the luminous air, he gazes into the golden glory of sunsets whose splendor is forever impressed on his memory.

Every hour of the journey through the Southwest is an hour of enchantment in the intense interest of the scenes. One must not miss the outlook when descending the steep grade down Raton Mountain; nor must he fail to be on the alert in passing through the strange old pueblos of Isleta and Acoma; he must not miss Cañon Diablo when crossing that wonderful chasm on the wonderful bridge, nor the gleam of the Lowell Observatory at Flagstaff on its pine-clad hill-slope, nor fail to gaze on the purple Franciscan peaks on which the lingering sunset rays recall to him the poet's line, —

"Day in splendid purple dying."

Like a modern Telemachus he sees "the baths of all the western stars."

Between La Junta in Colorado and Los Angeles in California there lies a journey which, in connection with its side trips, is unequalled, because there is only one Grand Cañon, one Pike's Peak with its adjacent wonderland, and because, as a rule, elsewhere in the United States — or in the world, for that matter, — forests do not turn into stone nor stars hurl themselves into the earth with a force that buries them too deep for resurrection. Through the East and the Middle West the mountains do not, on general principles, attempt any competition with the clouds, but content themselves with the gentle altitude of a mile or so; the stars stay decorously in the firmament and are not shooting madly about, trying fantastic Jules Verne

experiments to determine whether or not they can shine better from the centre of the earth than from their natural place in the upper air; the stars of the Eastern skies "stand pat," so to speak, and are not flying in the face of the universe; so that, altogether, in these regions it would seem quite evident that

> "The world is built in order,
> And the atoms march in tune."

These exceptional variations to the established order, however, — these wonderful peaks and cañons and forests and gardens of gods, — all these enchanted things lie, naturally, within the Land of Enchantment, within this vast territorial expanse replete with many other attractions. From La Junta let the traveller journey into Colorado with its splendor of resources, and in gazing upon the stately, solemn impressiveness of the Snowy Range he cannot but feel that Nature has predestined Colorado for the theatre of noble life and realize the influence as all-pervading. Infinite possibilities open before one as an alluring vista, and he hears the refrain, —

> "My spirit beats her mortal bars
> As down dark tides the glory slides
> And star-like mingles with the stars."

With the excursions offered, — grand panoramas of mountain views where the tourist from his lofty perch in the observation-car looks down on clouds and on peaks and pinnacles far below the heights to which his train

climbs, — with the cogwheel road ascending Pike's Peak, the fascinating drives through Cheyenne Cañon, the Garden of the Gods, Ute Pass, and around Glen Eyrie, and with the luxurious ease of life at "The Antlers," the traveller finds fairly a new world, rich in suggestion and wide outlook. This attractive region is, however, only one of the central points of interest in Colorado. Denver, the brilliant and fascinating capital; Pueblo, the metropolis of Southern Colorado; Glenwood Springs, the romantic and fashionable watering place and summer resort high up in the mountains on the beautiful "scenic route" of the Denver and Rio Grande; Boulder, the picturesque mountain town, with its State University so ably conducted; Greeley, the town of the "Union Colony," whose romantic and tragic story is a part of the great history of the Centennial State, and where an admirable normal school draws students from all over the country, even including New England, — these and a wealth of other features offer interest that is coming to engage the attention of the civilized world.

New Mexico has been more or less considered as one of the impossible and uncivilized localities, or has failed to establish any claim to being considered at all; yet here is a territory whose climate is simply delightful by virtue of its altitude, — cool in summer and mild and sunny in winter, — whose mines of amethysts and other precious stones suggest developments yet undreamed of; whose

ethnological interest, in the marvellous remains of Cliff-dwellers and of a people far antedating any authentic records, enchains the scientist; a territory whose future promises almost infinitely varied riches in many directions of its development.

Arizona is simply a treasure land. If it offered only that enthralling feature, the Grand Cañon, it would be a central point of pilgrimage for the entire civilized world; but even aside from this, — the sublimest vision ever offered to human eye, — even aside from the Grand Cañon, which dominates the world as the most sublime spectacle, — Arizona offers the fascinations of the Painted Desert, the Tonto Basin, the uncanny buttes that loom up in grotesque shapes on the horizon, the dreamy lines of mountain ranges, the strange pueblos, the productive localities where grains and where fruits and flowers grow with tropical luxuriance, the Petrified Forests, and the exquisite coloring of sky and atmosphere.

Southern California, with its brilliantly fascinating metropolis, Los Angeles; the neighboring city of Pasadena, the "Crown of the Valley"; with an entensive electric trolley-car connection with towns within a radius of fifty miles, and other distinctive and delightful features, almost each one of which might well furnish a separate chapter of description; with mountain trips made easy and enjoyable by the swift electric lines, — all this region fascinates the

imagination and indicates new and wonderful vistas of life in the immediate future. The vast and varied resources of the great Southwest will also, as they are developed, increasingly affect the economic aspects of the country.

To the traveller one fact stands out in especial prominence, and that is that the traditional primitive conditions in this region hardly continue to exist. The picturesque aspects of nature form the stage setting to very-much-up-to-date life. The opportunities and advantages already offered and constantly increasing are greater than would at first be considered possible. In isolated homes on the desert the children of the family will be found studying the higher mathematics, taking music lessons, or receiving lessons in languages (classic, or the romance languages) from some one in the neighborhood who is able to give such instruction. If any traveller expects to encounter the traditional "cow-boy" aspects of life, he will be very much disappointed. There is no refinement of life in the East that is not mirrored and duplicated in the West. There are no aspirations, no ideals, no fine culture in the East that have not their corresponding aspects in the great West. In fact, in many ways the West begins where the East leaves off. For instance, the new towns of the West that have sprung up within the past twenty years have never known what it was to have gas or horse-cars. They begin with electric lights and electric transit. Their schoolhouses are built with up-to-date methods, and the

houses, however modest, are constructed with a taste and a beauty unknown in the rural regions of the East. The square white house with green blinds and a straight stone-paved pathway to the front gate, so common in New England, is not seen in the West. Instead, the most modest little structure has its piazza, its projecting bay window thrown out, its balcony — something, at all events, tasteful and beautiful to the eye.

The journey from La Junta (in Colorado) to Los Angeles offers a series of enthralling pictorial effects that are invested with all the refinements of civilized life delightfully devoid of its commonplaceness. These long transcontinental trains with two engines, one at the front and one at the rear, with their different grades of the Pullman, the tourist, and the emigrant car service, are as distinctive a feature of the twentieth century as the "prairie schooners" were of the early half of the nineteenth century. The real journey begins, of course, at Chicago, and as these trains leave in the evening the traveller fares forth in the seclusion of his berth in the Pullman. The nights on a sleeping-car may be a very trance of ecstasy to one who loves to watch the panorama of the skies. Raise the curtain, pile up the pillows to the angle that one can gaze without lifting the head, and what ethereal visions one is wafted through! One has a sense of flying in the air among the starry spaces, especially if he chances to have the happy fortune of a couch on the side where

the moon is shining down, — a midsummer moon, with stars, and filmy, flitting clouds, — when the panorama of the air becomes the enchantment of a dream.

It is, literally, "such stuff as dreams are made of," and when one drops off into slumber, he utilizes it for his fancies of the night. Miss Harriet Hosmer, the famous sculptor, once related a story of a night journey she took with a party of congenial spirits on horseback between Rome and Florence. By way of "a lark" they rested by day and rode by night, and the beauty of the effects of light and shade sank into her mind so that she drew on them thirty years or more later for the wonderful designs in her great "Gates," which even rival those of Ghiberti. "The night hath counsel" and suggestion of artistic beauty as well, and the effects that one may get from a flying train are impossible to obtain under any other condition. After all, is it not a part of the fine art of living to take the enjoyment of the moment as it comes, in whatever guise, without lamenting that it is not something else?

These splendidly equipped trains of the Santa Fé service admit very little dust; the swift motion keeps up a constant breeze, and some necromancy of perpetual vigilance surrounds the traveller with exceptional cleanliness and personal comfort. One experiences a certain sense of detachment from ordinary day and daylight duties that is exhilarating.

ACOMA. TWO MILES DISTANT

Kansas City, the gateway to the great Southwest, might well claim attention as an important manufacturing and distributing centre; Kansas itself, once the bed of an inland sea, is not without scientific interest for the deposits of gypsum and salt that have left the soil so fertile, as well as for strange fossils revealing gigantic animals, both land and aquatic, that have lived there, — the mastodon, rhinoceros, elephant, the crocodile and shark, — many of whose skeletons are preserved in the National Museum in Washington. The prosperous inland cities with their schools and colleges, their beautiful homes and constant traffic, — all these features of Kansas, the state of heroic history, are deeply impressive. But it is Colorado, New Mexico, Arizona, with which these pages are chiefly concerned, and the especially picturesque aspects of the journey begin with La Junta.

Entering Colorado, the plateau is four thousand feet above sea level, and constantly rising. This altitude renders the climate of New Mexico particularly invigorating and delightful.

The most romantic and poetically enchanting regions of the United States are entered into on this journey, in which easy detours allow one to visit that mysterious "City in the Sky," the pueblo of Acoma, near Albuquerque in New Mexico; to make excursions to Montezuma's Well; to the mysterious ruin of Casa Grande; to the Twin

Lakes (which lie on a mountain crest); and to study other marvels of nature in Arizona. The splendors of Colorado, with the myriad mountain peaks and silver lakes, the mysterious cañons and deep gorges, the rose-flushed valleys lying fair under a sapphire sky in the luminous golden atmosphere, and the profound interest inspired in the general social tone of life in its educational, economic, and religious aspects, invest a summer-day tour through the Land of Enchantment with all the glory and the freshness of a dream.

CHAPTER II

DENVER THE BEAUTIFUL

"I will make me a city of gliding and wide-wayed silence,
With a highway of glass and of gold;
With life of a colored peace, and a lucid leisure,
Of smooth electrical ease,
Of sweet excursion of noiseless and brilliant travel,
With room in your streets for the soul."

STEPHEN PHILLIPS

DENVER the Beautiful is the dynamo of Western civilization, and the keynote to the entire scale of life in Colorado. The atmosphere seems charged with high destiny. "I worship with wonder the great Fortune," said Emerson, using the term in the universal sense, "and find it none too large for use. My receptivity matches its greatness." The receptivity of the dwellers in this splendid environment seems to match its greatness, and expand with the increase of its vast resources. As Paris is France, so Denver is Colorado. Hardly any other commonwealth and its capital are in such close relation, unless it be that of Massachusetts and Boston. Colorado is a second Italy, rather than Switzerland, as it has been called. Over it bends the Italian sky; its luminous atmosphere is that of Dante's country; at night the stars hang low as they

hang over the heights of San Miniato in fair Florence; the mountain coloring, when one has distance enough, has the soft melting purple and amethyst lights of the Apennines, and the courtesy of the people is not less marked than in the land of the olive and the myrtle. Then, too, the light — the resplendent and luminous effect of the atmosphere — is like that of no other state. The East is dark by comparison with this transparency of golden light.

As the metropolis of the great West between Chicago and the Pacific Coast, Denver has a continual procession of visitors from all countries, who pause in the overland journey to study the outlook of the most wonderful state in the Union, — that of the richest and most varied resources. To find within the limits of one state resources that include gold, silver, copper, lead, zinc, coal, and tin mines; agriculture, horticulture, stock raising, manufactures, and oil wells, sounds like a fiction; yet this is literally true. Add to these some of the most beautiful and sublime scenery in the world, the best modern appliances, and the most intelligent and finely aspiring class of people, and one has an outline of the possibilities of the Centennial State.

Denver is, geographically, the central city of the country, equally accessible from both the Atlantic and the Pacific coasts, from the North and the South. It has the finest climate of the continent; its winters are all sunshine and

exhilaration, with few cloudy or stormy days; its summers are those in which oppressive heat is hardly known, and the nights are invariably cool. It is a great railroad centre; it has infinite space in which to extend itself in any direction; it has unsurpassed beauty of location. No city west of Chicago concentrates so many desirable features, for all this wealth of resource and loveliness of scenic setting is the theatre of noble energy and high achievement. Denver is only twenty-six hours from Chicago; it is but forty-five hours from New York. Although apparently a city of the plains, it is a mile above sea level, and is surrounded with more than two hundred miles of mountain ranges, whose changeful color, in royal purple, deep rose, amber, pale blue, gleams through the transparent air against the horizon. The business and hotel part of Denver lies on a lower level, while the Capitol, a superb building of Colorado marble, and all the best residential region, is on a higher plateau. The Capitol has the novel decoration of an electric flag, so arranged that through colored glass of red, white, and blue the intense light shines.

The Denver residential region is something unusual within general municipal possibilities, as it has unbounded territory over which to expand, thus permitting each home to have it own grounds, nearly all of which are spacious; and these, with the broad streets lined with trees, give to this part of the city the appearance of an enormous

park. For miles these avenues and streets extend, all traversed by swift electric cars that so annihilate time and space that a man may live five, ten, or a dozen miles from his place of business and call it all joy. He insures himself pure air, beautiful views, and an abundance of ground. If the family desires to go into the city for evening lectures, concerts, or the theatre, the transit is swift and enjoyable. They control every convenience. These individual villas are all fire-proof. The municipal law requires the buildings to be of brick or stone, thus making Denver a practically fireproof city. Both the business blocks and the homes share the benefit of the improved modern taste in architecture. The city of Denver covers an area of eighty-nine square miles, and these limits are soon to be extended.

The Capitol has an enchanting mountain view; it also contains a fine museum of historic relics found in Colorado from cliff-dwellings and other points. A million dollars has been offered — and refused — for this state collection. The City Park, covering nearly four hundred acres, with its two lakes, its beds of flowers and groups of shrubbery; its casino, where an orchestra plays every afternoon in the summer, while dozens of carriages and motor cars with their tastefully dressed occupants draw up and listen to the music, is a centre of attraction to both residents and visitors. This park is to Denver as is the Pincian Hill to Rome, or as Hyde Park to London, — the fashionable drive

and rendezvous. Great beds of scarlet geraniums contrast with the emerald green of the grass, while here and there a fountain throws its spray into the air. Far away on the horizon are the encircling mountains in view for over two hundred miles, the ranges taking on all the colors of fairyland, while a deep turquoise sky, soft and beautiful, bends over the entire panorama. From this plateau four great peaks are in view: Pike's Peak, seventy-five miles to the south; Long's, Gray's, and James's peaks, all distinctly silhouetted against the sky, rising from the serrated range which connects them. During these open-air concerts in the park there is a midsummer holiday air over the scene as if all the city were *en fête*.

The architectural scheme of Denver's residential region harmonizes with the landscape. The houses are not the palaces of upper Fifth Avenue and Riverside drive, or of Massachusetts or Connecticut avenues in Washington; but there is hardly an individual residence that has not legitimate claim to beauty. The tower, the oriel window, and the broad balcony are much in evidence; and the piazza, with its swinging seat, its easy chairs, and table disposed on a bright rug, suggest a charm of *vie intime* that appeals to the passer-by. Books, papers, and magazines are scattered over the table: the home has the unmistakable air of being lived in and enjoyed; of being the centre of a happy, intelligent life, buoyant with enterprise and energy, and identified with the social progress of

the day. On the greenest of lawn a jet of water or, in many cases, a fountain plays, the advantage of an irrigated country being that the householder creates and controls his own climatic conditions. The rain, — it raineth every day when irrigation determines the shower; roses grow in riotous profusion on the lawn, and the crimson "rambler" climbs the portico; lilies nod in the luminous gold of the sunshine, and all kinds of foliage plants lend their rich color to these beautiful grounds that surround every home. To the children growing up in Denver the spectacle of dreary streets would be as much of a novelty as the ruins of Karnak. The line that divides the past from the present is not only very definite, but also very recent, as is indicated by the question of a five-year-old lad who wonderingly asked: "Mamma, did they ever have horses draw the trolley cars?" The mastodon is not more remote in antiquity to the man or woman of to-day than was the idea of horses drawing a car to this child. Between the nineteenth and the twentieth centuries the gulf of demarcation is almost as wide as between the fifteenth and the nineteenth.

The streets of Denver are very broad, usually planted with trees, and the smooth roads offer an earthly paradise to the motor-car transit that abounds in Denver. One of the happy excursions is that of motoring to Colorado Springs, seventy-five miles distant, a constant entertainment. With the splendid electric-transit system, anni-

hilating distance; with the broad streets paved after the best modern methods; with the wide and smooth sidewalks of Colorado stone and the almost celestial charm of the view, city life is transformed. Telephonic service is practically universal; electric lighting and an admirable water system are among the easy conveniences of this section, which is not yet suburban because of its complete identification with all other parts of the city.

The universality of telephonic intercourse in Colorado would go far to support the theory of Dr. Edward Everett Hale that the time will come when writing will be a lost art, and will be considered, at best, as a clumsy and laborious means of communication in much the same manner that the late centuries regard the production of the manuscript book before the invention of the art of printing. In few cities is the telephone service carried out to such constant colloquial use as in Denver. The traveller finds in his room a telephone as a matter of course, and there are very few quarters of an hour when the bell does not summon him to chat with a friend, from one on the same floor of the hotel to one who is miles away in the city, or even fifty or a hundred miles distant, as at Greeley, Colorado Springs, or Pueblo.

"How are you to-day?" questions the friendly voice. "Did you see so-and-so in the morning papers? And what do you think about it? and can you be ready at eleven to go to hear Mrs. —— lecture? and at one will

you lunch with Mrs. ——? the entire conversation to be in Italian? and could you go at about four this afternoon to a tea to meet an Oriental Princess who will discuss the laws of reincarnation? and will you also dine with us at seven, and go later to the Woman's Municipal Club that holds a conference to-night?" All those lovely things fall upon one with apparently no thought of its being an unusual day — this is Denver! This is twentieth-century life. This is an illustration of what can be done when the non-essential is eliminated from the days and that which is essential is felicitously pursued.

When the Denver woman remarked to the Eastern woman sojourner within the gates that she was unable to be away that autumn on any extended absence, as the campaign was to be more than usually important, the wanderer from the Atlantic shore irreverently laughed. Her hostess endeavored (unsuccessfully) not to seem shocked by this levity regarding serious subjects. She remembered that there were extenuating circumstances, and that the Eastern women had really never had a fair chance in life. Their part, she reflected, consisted in obeying laws and abiding by whatever was decreed, with no voice allowed to express their own preferences or convictions. She remembered that a proportion of the feminine New England intellect consecrates its powers and its time to extended researches in the Boston Public Library and in the venerable records of the Massachusetts Historical Society, in

a perpetual quest of information regarding its ancestors, who are worshipped with the zeal and fervor of the Japanese. The Boston woman, indeed, may have only the most vague ideas regarding the rate bill, the problem of the Philippines, the Panama Canal, or the next Governor of Massachusetts; but she is thoroughly conversant with all the details of the Mayflower and her own ancestral dignities. Recognizing the New England passion for its ancestry, a leading Boston journal offers a page, weekly, to open correspondence on the momentous question as to whether Winthrop Bellingham married Priscilla Patience Mather in 1699 or in 1700, and a multitude of similar questions concerning the vanished centuries. The Denver woman realized all this and was discreetly charitable in her judgment of her friend's failure to recognize the significant side of the political enfranchisement of women in Colorado. For despite some actual disadvantages and defects of woman suffrage in the centennial state, and a vast amount of exaggerated criticism on these defects, it is yet a benefit to the four states that enjoy it, — Colorado, Utah, Idaho, and Wyoming.

In a majority of the states of the entire nation there is a conviction (and one not without its claims) that women are adequately represented and protected in all their rights, as things are, and that it is superfluous to increase the vote.

The anti-suffrage argument suggests many reflections

whose truth must be admitted, and this side of the controversy is espoused and led by some proporion of men and women whose names inspire profound respect, if not conviction, with their belief. Still, the fact remains that when woman suffrage is subjected to the practical test of experience, the advantages are so obvious, its efficacy for good so momentous, that their realization fairly compels acceptance. In the entire nation there has never been a man or a woman whose clearness and profundity of intellect, moral greatness, and sympathetic insight into the very springs of national and individual life exceeded those of Lucy Stone, the remarkable pioneer in the political emancipation of women, whose logical eloquence and winning, beautiful personality was the early focus of this movement. Mrs. Stone surrounded herself with a noble group, — Mary A. Livermore, Julia Ward Howe, Thomas Wentworth Higginson, and others whose names readily suggest themselves, and with whom, in the complete companionship and sympathy of her husband, Dr. Henry B. Blackwell, she successfully worked, even though the final success has not yet been achieved. Other great and noble women — Susan B. Anthony, Elizabeth Cady Stanton — consecrated their entire lives and remarkable powers to the early championship of woman suffrage. The present ranks of women workers — the younger women — are so numerous, and they include so large a proportion of the most notable women of both the East and the West, that volumes would

not afford sufficient room for adequate allusion. In Denver the leading people are fully convinced of the responsibility of women in politics. Although the ballot has not been generally granted to women, the very movement toward it has resulted in their higher education and their larger freedom in all ways. The situation reminds one of the "subtle ways" of Emerson's Brahma:

"If the red slayer think he slays,
Or if the slain think he is slain,
They know not well the subtle ways
I keep, and pass, and turn again.

"Far or forgot to me is near;
Shadow and sunlight are the same;
The vanished gods to me appear;
And one to me are shame and fame.

"They reckon ill who leave me out;
When me they fly, I am the wings;
I am the doubter and the doubt,
And I the hymn the Brahmin sings."

. . . . .

Apparently, the principle of woman suffrage has "subtle ways" in which "to pass and turn again." It has recently turned in a manner to compel a new and more profound revision of all opinion and argument.

Colorado presents a most interesting field for the study of woman suffrage, and from any fair and adequate review of its workings and results there could hardly fail to be but one conclusion, — that of its signal value and importance as a factor in human progress. One of its special

claims is of a nature not down on the bills, — the fact of the great intellectual enlargement and stimulus, — aside from its results, which the very exercise of political power gives to the women of the state. It is seen in the higher quality of conversational tone and the tendency to eliminate the inconsequential and the inane because great matters of universal interest were thus brought home to women in connection with their power to decide on these matters. This result is perhaps equally seen among the women who rejoice and the women who regret the fact of their political enfranchisement. For in Colorado, as well as in other states, there is a proportion of women who do not believe in the desirability of the ballot for themselves. They sincerely regret that it has been "forced," as they say, upon them. This proportion in Colorado is not a large one, but it includes some of the most intelligent and cultured women, just as an enthusiastic acceptance of the ballot includes a much larger proportion of this higher order of women. However, welcome or unwelcome, desired or not desired, the ballot is there, and so the women who regret this fact yet realize its responsibility and feel it a moral duty to use it wisely as well. And so they, too, study great questions, and discuss them, and fit themselves to use the power that is conferred upon them. All this reacts on the general tone of society, and the quality of conversation at ladies' lunches, at teas, and at clubs, is of a far higher order than is often

found in other states among the more purely feminine gatherings.

Among the women who have successfully administered public office in Colorado was the late Mrs. Helen Grenfell, whose record as State Superintendent of Public Instruction was so remarkable that both political parties supported her. A Denver journal said of her:

"Mrs. Grenfell's term has lasted six years, the last two years having been under a Republican administration, although Mrs. Grenfell is a Democrat. Her most notable achievement has been in her conduct of the school lands of the state, making them valuable sources of revenue. Her policy from the first was against the sale of the school lands, which comprise some three million acres. The income from such sales had been limited, as the investments were prescribed, and the interest rate rather low, as Western interest goes. The leasing system was inaugurated under Mrs. Grenfell's direction, and the result was an increase of school revenues of nearly two hundred thousand dollars a year, with no decrease in the capital. The Land Department of the state shares the credit with the state superintendent of public instruction, as they have administered her policy wisely, but the policy was hers alone."

Judge Lindsay of Denver, giving an official opinion as to the desirability of woman suffrage for Colorado, said:

"Woman suffrage in Colorado for over ten years has more than demonstrated its justice. No one would dare to propose its repeal; and, if left to the men of the state, any proposition to revoke the right bestowed upon women would be overwhelmingly defeated.

"Many good laws have been obtained in Colorado which would not have been secured but for the power and influence of women.

"At some of the elections in Denver frauds have been committed. Ninety-nine per cent of these frauds were committed by men, without any connivance or assistance, direct or indirect, from women; but because one per cent were committed by women, there are ignorant or careless-minded people in other states who actually argue that this is a reason for denying women the right to vote. If it were a just reason for denying suffrage to women, it would be a ten times greater reason for denying it to men.

"In Colorado it has never made women any the less womanly or any the less motherly, or interfered with their duties in the home, that they have been given the right to participate in the affairs of state.

"Many a time I have heard the 'boss' in the political caucus object to the nomination of some candidate because of his bad moral character, with the mere explanation that if the women found him out it might hurt the whole ticket. While many bad men have been nominated and elected to office in spite of woman suffrage, they have not been nominated and elected because of woman suffrage. If the women alone had

a right to vote, it would result in a class of men in public office whose character for morality, honesty, and courage would be of a much higher order. . . .

"People have no right to judge woman suffrage in Colorado by the election frauds in a few precincts. The election frauds in Philadelphia, where women do not vote, were never used as a reason why suffrage should be denied to men. . . .

"With women, as with men, it requires more or less public sentiment to arouse them to their civic duties; but when aroused, as they frequently are, their power for good cannot be overestimated. Again, the very fact that the women have such a power is a wonderful reserve force in the cause of righteousness in Colorado, and has been a powerful deterrent in anticipating and opposing the forces of evil.

"It does not take any mother from her home duties or cares to spend ten minutes in going to the polling place and casting her vote and returning to the bosom of her home; but in that ten minutes she wields a power that is doing more to protect that home now, and will do more to protect it in the future, and to protect all other homes, than any power or influence in Colorado.

"I know that the great majority of people in Colorado favor woman suffrage, after more than a decade of practical experience, — first, because it is fair, just, and decent; and secondly, because its influence has been good rather than evil in our political affairs."

Judge Lindsay's words represent the general attitude of the representative people of the state.

The Hon. Henry M. Teller, senior senator of Colorado, is one of the most interesting men in the Centennial State, and the traveller who may meet and talk with him is impressed with his quiet sincerity, with the sense of reserved power with which he seems endowed, and the refinement and directness of his methods. He is by birth an Eastern man, and a graduate of Harvard; but his mature life has been passed in Colorado. As a lawyer his law office claims much of his time and thought, even with all the great tide of national interests with which he is identified. He is a thorough and, indeed, an astute politician; not in the "machine" sense, but with a very clear and comprehensive grasp of the situation and a large infusion of practical sagacity. Senator Teller is in no sense an enthusiast. He is responsive to high aims and high ideals; he knows what they are, so to speak; he recognizes them on sight; he never falls into the error of undervaluing them; but he is not a man to be carried away by an ecstatic vision, and he would have no use for wings at all where he had feet. He would regard the solid earth as a better foundation, on the whole, than the air, and one more suited to existing conditions.

Senator Teller has had more than a quarter of a century's experience in political life and in statesmanship. For two years he was a member of the Cabinet. For twenty-seven years he has been in the Senate, where, with Senator Hoar of Massachusetts, he shared the highest

honor, and the most absolute confidence, in both his flawless integrity and conspicuous ability, that the Senate, and the nation as well, can give to him.

Senator Patterson, the junior senator from Colorado, is a man whom, if he encounters an obstacle does not grant it the dignity of recognition. He instantly discovers the end,—the desired result,—and declares, per saltum, "It is right; it should be done,—it shall be done." Senator Patterson is a man of very keen perceptions and one with whom it is easy to come into touch instantly; he is responsive, sympathetic, full of faith that the thing that ought to be accomplished can be accomplished, and therefore that it shall be. Senator Patterson has the typical American experience of successful men lying behind him. He was on familiar terms with the intricacies of a newspaper office in his youth; he studied in an Indiana college without an annual expenditure of that twenty thousand dollars which some of the latter-day Harvard undergraduates find indispensable to the process of securing their "B. A," and tradition records, indeed, that the junior Colorado senator, in the prehistoric days of his youth, set out for the fountain of learning with a capital of forty dollars; that he frugally walked from Crawfordsville to Indianapolis that he might not deplete his financial estate which was destined to buy a scholarship, and that in this unrecorded tour in the too, too truly rural region of his early life, he cleaned two clocks on the way in payment for lodging, and

that he cleaned them uncommonly well. Of all this traditionary history who shall say? Senator Patterson is a man who would always keep faith with his aims and convictions. He is sunny and full of wit, and full of faith in the ultimate triumph of good things in general, and is, all in all, one of the most genial and delightful of men — and senators.

It is related that Senator Patterson first dawned upon Denver in its primeval period of 1872, when its municipal affairs were conducted by two prominent — if not eminent — gentlemen, one of whom was the champion gambler, and the other the champion brewer of the metropolis. There were eleven thousand nine hundred and ninety-eight other citizens in this municipality besides the brewer and the gambler (and the population was said to have been twelve thousand in all), and the eleven thousand nine hundred and ninety-eight, like "The Ten" of early Florentine history, decided that would "reform the town." Their united effort was to elect Mr. Patterson as Mayor. And a good one he proved; and he has gone on and on, in the minds as well as in the hearts of his fellow-citizens, until now he is the colleague of Senator Teller, and he offers another typical illustration of true American integrity and honorable ambition and success. Personally, Senator Patterson is one of the most winning men in the world, and one delights in his success and the high estimation in which he is held.

The development of Colorado and other parts of the great Southwest during the past half-century has created a new order of employment in that of the government expert, — the specialist in upland or hydraulic irrigation, in engineering and mining problems. The government surveying work has also increased largely, both in extent and in the greater number of specialties now required. The Geological Survey and the Agricultural Department, both included under the Department of the Interior, are rapidly multiplying branches of work that require both the skilled training and ability for original research and accomplishment. These positions, which command government salaries at from some eighteen to twenty-five hundred dollars a year, afford such opportunity for the expert to reveal his value that private corporations and business houses continually draw on the ranks of the government employees. Of late years the demand for the expert irrigation engineer has been so great in Colorado as to seriously embarrass the government forces by drawing some of the best men for private service. Denver is an especial centre for these enterprises, as being the natural metropolis for the vast inter-mountain region and the plains country of the Missouri River. This vast territory will support many millions more of population. In fact, the dwellers within this described territory at this day are but pioneers on the frontier to what the future will develop, although they already enjoy all the bene-

fits of the older states, with countless advantages beside which they cannot enjoy.

The smelteries in Denver, of which the Grant is the largest, treat millions of pounds of copper and lead, and great quantities of silver and gold, while there are also extensive ones in Pueblo, Leadville, Durango, and other places. There is also a good proportion of Colorado ore which is not treated at all at smelteries, but is of a free-milling order. The revenue from mining has exceeded fifty millions of dollars annually of late years, but the revenue from agriculture exceeds that of the mines, and to these must be added some twenty millions a year from live stock during the past two or three years. In the aggregate, Colorado has an internal revenue of hardly less than one hundred millions a year, and this largely passes through Denver as the distributing point, constituting the Capital one of the most prosperous of young cities. Denver stands alone in a rich region. One thousand miles from Chicago, six hundred miles from Kansas City, and four hundred miles from Salt Lake City, Denver holds its place without any rival.

The ideal conditions of living have never been entirely combined in any one locality on this sublunary planet, so far as human history reveals; and with all the scenic charm, the rich and varied resources, and the phenomenal development of Colorado, no one could truthfully describe it as Utopia. There is no royal road to high achievement

in any line. Difficulties and obstacles are "a part of the play," and he alone is wise who, by his own determination, faith, and persistence of energy, transforms his very obstacles into stepping-stones and thus gains the strength of that which he overcomes.

Northern Colorado has great resources even beyond the coal fields that will make it the power centre; with its prestige of Denver, and such surrounding towns as Greeley, Boulder, Fort Collins, Golden, and others, all of which fall within a group of social and commercial centres that will soon be interconnected by a network of electric trolley lines. For the electric road between Greeley and Denver Mr. J. D. Houseman has secured a right of way one hundred and fifty feet wide, the rails being midway between the Union Pacific and the Burlington lines. Mr. Houseman is one of the noted financiers of the East who came to Denver to incorporate and build this road, and his is only one of three companies that are now in consultation with the power company negotiating for the supplies which will enable them to build the proposed new roads.

The Seeman Tunnel, which is to be constructed near Idaho Springs, at a distance of fifty miles from Denver, and which is to be twelve miles in length, although at an elevation of eighty-five hundred feet, is yet to extend under Fall River and the Yankee, Alice, and the Lombard mining districts. It will be one of the marvels of the state, and will penetrate a thousand mining veins. The

Continental Mines, Power and Reduction Company, recently incorporated with a capital of three millions, of which Captain Seeman is the president, owns many of the mining veins which will be touched by this tunnel. Many of the veins to which this tunnel will afford approach have not been accessible heretofore for more than four or five months in the year. For the remaining six or seven months travel is practically impossible in these mountains; the "claims" cannot be reached, as they lie in the region of perpetual snow. When the Seeman Tunnel is completed the owner of any claim that is tapped by it can, by paying a certain royalty per ton for each ton of ore mined, obtain the right to work it in the tunnel, thus being able to proceed through the entire year and at a far less cost in production than at present. Regarding this gigantic enterprise, Captain Seeman said, in June of 1906, that the work would be pushed as rapidly as men, money, and machinery could advance it, and, he added: "I consider it one of the greatest tunnels ever attempted, and one that will hold the record for mining tunnels. I am confident that we will strike enough ore within the first two or three miles to keep us busy for years." The Leviathan is one of the first veins that the tunnel is expected to tap, — a vein three hundred feet wide on the surface, — and while already traced for more than three miles, it holds every promise for as yet uncalculated extension. The Lombard is another vein of leading im-

portance which promises to be a bonanza. Gold is the principal mineral that appears in these veins, although silver, lead, and copper are found. Another ore, tungsten, used for hardening in armor plates, large guns, and the best mechanical implements, — an ore valued at six hundred dollars per ton, — has been discovered in these veins. The Seeman Tunnel is located directly under James's Peak.

Another of the remarkable engineering marvels that mark the progress of Colorado is the Moffat road, the new railroad between Denver and Salt Lake City, now open as far as Kremling, which initiated its passenger service in the late June of 1906 with daily excursions, in solid vestibuled trains, making the round trip between Denver and Tolland, Corona (the region of perpetual snow) and Arrow, on the Pacific slope of the Continental Divide, in one day. This vast enterprise is due to the genius and the prophetic vision of President David H. Moffat of the First National Bank in Denver, one of the leaders in all that makes for the best interests and the advancement of the Centennial State, and of the future of Denver the Beautiful. Mr. Moffat says:

"Denver's population is growing steadily and naturally. Some time ago I made the prediction that Denver would have three hundred thousand inhabitants within five years. I see no reason for changing my estimate. Rather, I might increase it, but I will be conservative.

"The things that build up a city's wealth and population are 'round about Denver in prodigal quantities. If Denver had only the state of Colorado from which to draw, her future would be absolutely assured. But consider the vast territory that is tributary to this city. It stretches away to the east, west, north, and south, an area quite one-third of the whole country, and quite the richest in all natural resources. Denver is the geographical hub of this territory."

The Moffat road will climb the ramparts formed by the main range of the Rocky Mountains west of Denver and run directly westward, passing through one of the most fertile sections of the state. The road ascends to an altitude of eleven thousand six hundred feet, running through a region rich in minerals, and especially in coal. The sublime scenery along the route has already made it most popular for excursions, which draw a vast tourist travel continually. President Moffat's road has brought Routt County into such prominence that investors from the East are being attracted to this region, a notable one among these being the Eastern capitalist, C. B. Knox, who proposes to invest in copper, coal, and iron in Routt County, which he regards as the richest section in Colorado. Mr. Knox engaged the services of several experts to examine and report to him upon this region. To a press correspondent who inquired of Mr. Knox his views regarding Colorado, he said:

"I believe that there is wealth unmeasured in Routt County, and I am out here to put some money in there. I am sure that this section of the state is one of the richest territories in the country. How I became interested is a long story, — too long to tell. But it is sufficient to say that I have heard of Routt County for so long, and from so many different people in whose judgment I have the utmost faith, that I have come out here to invest some money. I believe thoroughly that money put into Routt County will within a few years bring handsome returns. If I did not believe that I should not be here looking for a place in which to invest money.

"I have been to Steamboat Springs myself, and I am thoroughly of the opinion that it is going to be one of the big towns of your state. The fact is, I have never seen a better looking proposition in my life than investing money in Routt County. Already I have purchased some land, and I am going to get more. It is this iron proposition that I am having investigated the most completely. The iron to be found in Routt County looks awfully good to me, and there is no question in my mind that Routt County is the place to put capital.

"I cannot, of course, at this time say just what properties I have in view, — that would not be good business; but I have under investigation locations of mineral property near Steamboat and north and south of there. I have decided on nothing definite; that is, as to just what ores I will endeavor to exploit, for the whole proposition looks so good to me that I am going to purchase probably several different kinds of

propositions. As I say, though, I am most interested in the iron ore, as that seems to present the greatest opportunities."

These views are significant not only as those of an experienced financier who has unbounded faith in the future of Colorado, but also as typical of the wide range of vision which is open to the trained eye of the capitalist and the organizer of great enterprises. The spellbinder may work his will in Colorado. It is the land of infinite opportunity. It offers resources totally unsurpassed in the entire world for unlimited development, and these resources await the recognition of those whose vision is sufficiently true to discern the psychological moment.

The first railroad reached Denver thirty-six years ago, and the city has now sixteen railroad lines. It has a population of over two hundred and twenty-five thousand. It is a geographical centre, which assures its permanent importance as a distributing point. With two hundred and twenty-five miles of street railway, with seventy-five miles of paved streets, and a taxable property estimated at one hundred and two and a third millions, Denver holds unquestionable commercial importance.

When, on the evening of July Fourth, 1906, the splendid electric flag, with the national colors intensified a thousand fold in brilliancy by the electrical lights, floated in the air from the dome of the Capitol on its commanding eminence, and the new city Arch, a veritable *Arc de Triomphe*, flashed its "Welcome" in electrical light to eager

throngs, the moment was one which might well have been fixed on the sensitive plate of the camera of the future as typical of the entire horoscope of Denver the Beautiful. On that day had been unveiled this triumphal arch, placed at the Seventeenth Street entrance to the city from the Union Depot, which, in its sixteen hundred electric lights, flashes its legend upon the vision of every one entering Denver. This arch, weighing seventy tons, eighty feet in length, and with a central height of fifty-nine feet, is constructed from a combination of metals so united as to give the best results in strength, durability, and beauty, and thus to stand as a symbol of the composite life of the nation. Over the entire surface has been placed a plating of bronze finished with *verde antique*, to thus give it the aspect of ancient bronze. It is built at a cost of twenty-two thousand dollars, and the originator of the idea, Mr. William Maher of Denver, received the entire subscriptions for it within one day. The design is that of a Denver girl, Miss Marie Woodson, whose name must always be immortalized in connection with this beautiful achievement which typifies the spirit of the city. Constructed by one of the city manufactories, the design and the execution are thus exclusively of Denver. In his address at the unveiling of the arch, Chancellor Buchtel said:

"To all men who stand for honesty, for industry, for justice, for reverence for law, for reverence for life, for education,

for self-reliance, for individual initiative, for independence, and for sound character, the city of Denver speaks only one word, and the state of Colorado speaks only one word, and that word we have emblazoned on this glorious Arch, — the word 'Welcome.'"

Dean Hart, offering the Invocation, referred to the scriptural fact that God had instructed his leaders to build monuments that they might bear witness to some act or covenant, and it was right that the people of Denver should raise this similar monument to their ideals of peace and happiness and truth and justice. Mayor Speer, accepting the gift on behalf of the city, emphasized the fact that the arch was to stand in its place for ages as the expression of the attitude of the citizens to the strangers who enter their gates. "It is intended to reflect our hospitality," said Mayor Speer, "on a traveller's arrival and on his departure. It is more than a thing of beauty; it is the type of the new spirit in Denver, an awakening of civic pride that is sure to be followed by much that is artistic and beautiful in our beloved city."

The spirit of Denver the Beautiful is finely interpreted in these words by representative citizens. It is the spirit of generous and cordial hospitality to all who are prepared to enter into and to contribute to its high standards of life. It is the spirit of continually forging ahead to accomplish things; of that irresistible energy, com-

bined with the eternal vigilance, which is not only the price of liberty, but the price of almost everything worth having. With this zeal for the great achievements, — carrying railroads through the mountains, opening the inexhaustible treasures of mines, bringing the snow of mountain peaks to irrigate the arid plains, establishing electric transit for fifty miles about, and telephonic connection that brings an area of hundreds of miles into instant speaking range with Denver, — with all the zeal for these executive accomplishments, the spirit of Denver is focussed on that social progress which is aided and fostered by all modern mechanical facilities. Education, culture, and religion are nowhere more held as the essentials of social progress than in Denver. Something of the nature of the problems of civilization that confronted the early pathfinders in Colorado may be inferred from the words of Major Long, — whose name is now perpetuated by the mountain peak that bears it, — when, in 1862, he stated, in an official report to the government:

"This region, according to the best intelligence that can be had, is thoroughly uninhabitable by a people depending on agriculture for their subsistence, but, viewed as a frontier, may prove of infinite importance to the United States, inasmuch as it is calculated to serve as a barrier to prevent too great an extension of our population westward and secure us against the machinations or incursions of an enemy that might otherwise be disposed to annoy us in that quarter."

Less than sixty-five years have passed since the region of which Denver is the great centre was thus pronounced useless except as a frontier to serve as protection from an enemy, and this judgment reminds one of a keen insight into the evolutionary progress of life expressed by Mrs. Julia Ward Howe when she remarked that "Every generation makes a fool of the one that went before it." Colorado, pronounced "thoroughly uninhabitable" in 1842, was organized as a territory in 1861 and in 1876 admitted as a state.

Darwin, who regarded "climate and the affections" as the only absolute necessities of terrestrial existence, should have lived in Denver, for of all the beautiful climates is that in which revels the capital of Colorado. The air is all liquid gold from sunrise till sunset; the mountains swim in a sea of azure blue; the ground is bare and dry in winter, affording the best of walking, and there are few cities where the general municipal management exceeds or is, perhaps, even as good as that of Denver. The electric street-car service is on schedule time, and the two hundred and twenty-five miles of its extent already, with increase in the near future, is certainly an achievement for a young city. Nature is a potent factor in this excellent service, as there is no blocking by heavy snowstorms and blizzards, as in the Middle West and the East.

The gazer in the magic mirror of the future requires little aid from the imagination to see, in the growth and

development of Denver, an impressive illustration of the significance of the name of the state of which it is the capital and the keynote. With what felicitous destiny is the name invested in the old Castilian phrase, "*A Dios con le Colorado*" (Go thou merrily with God), — a parting salutation and benediction. Denver is, indeed, more than a state capital; it is the epitome of the great onward march of civilization, and it must always be considered in its wide relations to all the great Southwest as well as in respect to its own municipal individuality.

No citizen of Denver has contributed more to the moral and intellectual quality of the city as one of the conductors of great enterprises held amenable to the higher ideals of citizenship, than has Mr. S. K. Hooper of the Denver and Rio Grande, which is one of the marvels of the West in scenic glory. From May till October pleasure tourists throng this marvellous route through the Royal Gorge, through mysterious cañons and across the Divide. For it must always be remembered that Denver is a great city for tourists and season visitors, and the floating population exceeds a hundred thousand annually. Beautiful as it is in the winter, Denver is also essentially a summer city. There is not a night in the summer when the wind, cool, refreshing, exhilarating, does not blow from the great rampart of the snow-clad, encircling mountains. There is not a morning when the wind does not come again, sending the blood leaping through the veins, while

the sun rides across the heavens in a glory of brilliancy, and the great range rears its white head to the cloudless blue sky.

The Denver Art League is a flourishing association that has under its auspices classes in drawing, water colors, and sculpture. Already many artists of Colorado are winning a name. A new Public Library is now in process of erection, and the Chamber of Commerce also maintains a free library of some twenty-five thousand volumes, the reading-room open every day in the year. The city appropriates six thousand dollars a year for the expenses of this institution.

The educational standards of Denver are high. Drawing, music, and German are included among the studies of the grammar schools, and physical culture is introduced in each grade. The high school building cost a quarter of a million dollars, and stands second in the entire country in point of architectural beauty and admirable arrangements. Besides the splendid public-school system there is the University of Denver, a few miles from the city; St. Mary's (Catholic) Academy, and two large (Episcopal) schools for girls and boys, respectively, — "Wolfe Hall" and St. John's College. The Woman's College and Westminster University complete this large group of educational institutions which centre in Denver. There is also the University of Colorado at Boulder, which has established a record for success under the able admin-

istration of Dr. James H. Baker, who, in January of 1892, was called to the presidency after having served as principal of the Denver High School for seventeen years. President Baker is well known in educational circles in the United States as a scholarly man and a capable college president. He has been offered the presidency of other State universities from time to time, but has preferred to remain in Boulder and to concentrate his efforts toward making this institution one of the largest and best of the state universities. He has always been active in the State Teachers' Association and the National Council of Education.

For three years past the University of Colorado has held a summer school with a large attendance of teachers and college students. In this past season of 1906, Professor Paul Hanus of Harvard University gave a valuable course of lectures on education, and Professor Hart, also of Harvard, conducted a course in history.

Over a hundred and fifteen thousand pupils are enrolled in the public schools of Denver, including all grades, from the primary to the high school. The latter offers the full equivalent of a college education freely to all.

The churches of Denver are numerous, and include many fine edifices besides the large granite Methodist Church that cost over a quarter of a million dollars. It is not, however, only the church structures that are noble and impressive, but the preaching in them is of

an unusually high order of both intellectual power and spiritual aspiration. The keen, critical life of Colorado's capital demands the best thought of the day. The wonderful exhilaration of the atmosphere seems to exert its influence on all life as a universal inspiration.

The new building for the Denver Public Library is under process of construction, an appropriation of a quarter of a million dollars having been made for the edifice, which will stand in a small triangular park, insuring air and light, and giving to its approach a stately and beautiful dignity.

The Colorado capital is tending to fulfil the poet's ideal of affording

"room in the streets for the soul."

The life is most delightful. Without any undue and commonplace formalities, yet always within that fine etiquette which is the unconscious result of good breeding, the meeting and mingling has a cordial and sincere basis that lends significance to social life. The numerous clubs, and the associations for art and music, for Italian, French, and German readings, are all vital and prominent in the city, and the political equality of woman imparts to conversation a tone of wider thought and higher importance than is elsewhere invariably found.

Denver, which should be the capital city of the United States, is pre-eminently the convention city.

Even with all the beauty of Washington and the vast sums that have been expended within the past fifteen years in the incomparable structure for the Library of Congress, and in other fine public buildings, and the splendor of the private residence region, — even with all this, and the fact that the Capitol itself is one of the notable architectural creations of the world, the nation is great enough and rich enough to found a new capital which should far surpass the present one, however fine that present one may be. However great are the treasures of art and architecture in Washington, the change could be, even now, made with the greatest advantage for the future. Within a quarter of a century all that invests Washington with such charm in architectural beauty and in art could be more than duplicated in Denver. The nation has wealth enough, and the most modern ideas and inspirations in these lines surpass those of any previous age or decade. The present is "the heir of all the ages."

No one need marvel that Denver ranks as the western metropolis of the Union, with its delightful climate, its infinite interests, its centre as a point for charming excursions, and its sixteen railroad lines.

In this atmosphere of opportunity and privilege there is, indeed, "room for the soul" and all that the poet's phrase suggests. There is room for all noble and generous development; for the expansion of the spirit to ex-

press itself in all loveliness of life, all splendid energy of achievement; and in all that makes for the supreme aim of a nation, — that of a Christian civilization, — no city can offer greater scope than does Denver the Beautiful.

CHAPTER III

THE PICTURESQUE REGION OF PIKE'S PEAK

"And ever the spell of beauty came
And turned the drowsy world to flame."

EMERSON

IN the picturesque region of Pike's Peak there is grouped such an array of scenic wonders as are unrivalled, within the limits of any corresponding area, in the entire world. To this region Colorado Springs is the gateway, and the poetic little city is already famous as one of the world resorts whose charm is not exclusively restricted to the summer. The winter is also alluring, for Colorado is the land of perpetual sunshine. One turns off the steam heat and sits with open windows in December. The air is electric, exhilarating. The cogwheel road up Pike's Peak is stopped; but almost any of the other excursions one can take as enjoyably as in summer. The East is, apparently, under the delusion that the land is covered with snow up to the very summit of Pike's Peak. On the contrary, the ground is bare and dry; the birds are singing, the sun shines for all, and the everlasting hills silhouette themselves against the blue sky in all their

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grandeur. One easily slips into all the charm and fascination of Colorado days through these resplendent winters, when there are two hours more of light and sunshine in Colorado, on account of its altitude, than in any state to the eastward. The climate of Colorado Springs has a perfection that is remarked even in the Centennial State, where, in every part, the climate is unsurpassed in sunshine and exhilaration. Especially, however, is Colorado Springs a summer resort, as is Saratoga or Newport or Bar Harbor. Its season is increasingly brilliant and crowded. People come to stay a day and prolong it to a week, or come for a week and prolong their stay to a month. The driving is fine, the motor cars are abundant, the excursions are delightful, and the air is as curative and exhilarating as is possible to conceive. The inner glories of the Rocky Mountains, with their vast cañons and giant peaks; their waterfalls dashing over precipices hundreds of feet in height; the fascinating glens and mesas for camping excursions, or for scientific research and study, are all reached by this gateway of Colorado Springs.

Pike's Peak, this stupendous continental monument, dominates the entire region. The atmospheric effects around its summit offer a perpetual panorama of kaleidoscopic changes of color and cloud-forms. Looking out on the Peak from Colorado Springs, three miles from its base, there are hours when it seems to be actually approaching with such swift though stately measure that one involun-

tarily shrinks back from the window in irrational alarm lest the grim monster shall bear down upon it, with a force inevitable as Fate; disastrous as a colossal iceberg wandering from Polar seas and sweeping down with irresistible force against the side of a transatlantic liner. In a lightning flash of instantaneous, unreasoning vision, one beholds in imagination the impending destruction of a city. It becomes a thing endowed with volition; a weird, uncanny monster, the abode of the gods who have reared their monuments and established their pleasure-grounds in their strange, fantastic garden at its foot.

Again, the Peak enfolds itself in clouds and, secure in this drapery, retires altogether from sight, as if weary of being the object of public view. It is as if the inmates of a house, feeling an invasion of public interest, should turn off the lights, draw the curtains, and close the shutters as a forcible intimation of their preference for privacy and their decision to exclude the madding crowd. Sometimes the Peak will flaunt itself in glorious apparel and gird itself in strength. With light it will deck itself as with a garment. It surprises a sunrise with the reflection of glory transfigured into unspeakable resplendence. It is the royal monarch to which every inhabitant of the Pike's Peak region, every sojourner in the land, must pay his tribute. The day is fair or foul according as Pike's Peak shall smile or frown. All the cycles of the eternal ages have left on its summit their records,—the silent and

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hidden romance of the air. The scientist alone may translate this aërial hieroglyphic.

> "Omens and signs that fill the air
> To him authentic witness bear."

This monumental peak of the continent shrouds in oblivion its mystic past, and still the handwriting on the wall may be read by him who holds the key to all this necromancy. The record of the ages is written on parchment that will never crumble. The mysteries of the very creation itself, — of all this vast and marvellous West, — of infinite expanse of sea and of volcanic fires that swallowed up the waters and crystallized them into granite and porphyry, — this very record of Titanic processes is written, in mystic characters, in that far upper air where the lofty Peak reigns in unapproachable majesty. For while there are other peaks in the Rocky Mountains as high, — and Long's Peak even exceeds it in altitude, — there is no other which rises so distinctly alone and which so supremely dominates an infinite plateau that extends, like the ocean, beyond the limit of vision.

There is one glory of the moon and another glory of the stars, as well as the glory of the sun, in this mountain region of Colorado Springs. The sunsets over the mountains are marked by the most gorgeous phenomena of color before whose intensity all the hues of a painter's palette pale. The gates of the New Jerusalem seem to open.

SUMMIT OF PIKE'S PEAK, COLORADO

Great masses of billowy clouds in deepest, burning gold hang in the air; the rainbow hues of all the summers that have shone upon earth since the first rainbow was set in the heavens, reflect themselves in a thousand shimmering cloud-shapes. It is one of the definite things of the tourist's day to watch from the western terrace of "The Antlers" these unrivalled sunset effects; and when, later (still in compliance with the unwritten laws that prevail in the Empire of Transcendent Beauty), dinner is served at small tables on the terrace,—where the flowers that form the centrepiece of each table, the gleam of exquisite cut glass and silver, and the music from an orchestra hidden behind the palms and tall roses that fling a thousand fragrances on the enchanted air all blend as elements of the faëry scene whose background is a panoramic picture of mountains and sky, — the visitor realizes an atmosphere of enchantment that one might well cross a continent to gain.

Again, there is the glory of the night. A young moon glances shyly over the mountain summit and swiftly retires to her mysterious realms on the other side. Each ensuing night she ventures still further afield, gazing still longer at the world she is visiting before she again wings her flight down the western sky, pausing, for a tremulous moment, on the very crest of the mountains ere she is lost to sight in the vague distance beyond. The stars come and go in impressive troops and processions. They float up from behind the mountains till one questions as to

whether the other side is not a vast realm of star-dust in process of crystallizing into planets and stars. Has one, then, at last arrived at the Land that is the forge of the gods who create it? May one here surprise the very secrets of the Universe? Perhaps some dim, mysterious under-world lies over that colossal range in which celestial mechanism is at work sending forth and withdrawing the shining planetary visitants, so continuous is the procession of stars through all the hours of the night. Each star, as it rises over the mountains or sets behind them, pauses for an instant on the crest for a preliminary survey, or a parting glance, of the world it is entering or leaving.

It is still in the realms of doubt as to whether there may be discovered a royal road to learning; but a royal road to the summit of Pike's Peak, more than fourteen thousand feet above sea level, has been, since 1890, an accomplished fact in the Manitou and Pike's Peak cog-wheel road, starting from Engleman's Glen, one of the famous resorts of Manitou. This lovely town, that dreams away its summer at the base of Pike's Peak guarded by precipitous mountain walls, is connected with Colorado Springs by electric trolley, and the little journey of four miles is one of the pleasure excursions of the region. The route lies past the "Garden of the Gods," where the curious shapes of red sandstone loom up like spectral forms in some Inferno.

Like Naples, Colorado Springs is the paradise of the

tourist, offering a new excursion for every day in the season; and there are few of these whose route does not include lovely Manitou, which is also the objective point from which to fare forth on this journey above the clouds, into those mysterious realms where he who listens aright may hear spoken the words which it is not lawful for man to utter. The journey into aërial spaces opens in a defile of one of the deep cañons, the train on the one hand clinging to the wall, while on the other one looks down a vast precipice, at the foot of which dashes a river over gigantic boulders. The route is diversified by the little stations on the way, — Minnehaha, whose waterfall indeed laughs in the air, and is given back in a thousand ghostly echoes; the Half-Way House, nestling under the pinnacled rocks of Hell Gate — must one always pass through the portals of Hades on his way to Paradise? Strange and grotesque scenery companions the way. On the mountain-side one finds — of all things — a newspaper office, where a souvenir daily paper is issued with all the news of that new world above the clouds, Pike's Peak. The ascent is very steep in places. The verdure of the foothills vanishes, the trees cease to invade this upper air, and only the dwarfed aspen shivers in the breeze as it clings to some barren rock. New vistas open. The world of day and daylight duties is left behind. Gaunt, spectral rocks in uncanny shapes haunt the way. The air grows chill; car windows are closed, and warm wraps

are at a premium. But the scene below! The sensation of looking down on the clouds, the view of Lake Moraine, an inland sea high in the mountains; the new sensations of the rarefied air, — all these seem to initiate one into a new world. From the summit, reached in a journey of ninety minutes, the view can only be described as that of unspeakable awe and sublimity. An expanse of sixty thousand miles is open to the gaze. To the west rise a thousand towering peaks, snow clad, in a majesty of effect beyond power of portrayal. To the east the vast plateaus stretch into infinite space. Below, the sun shines on floating clouds in all gleams of color. In the steel tower of the new Summit Hotel is a powerful telescope that brings Denver, eighty miles distant, into near and distinct view. In Colorado Springs, fourteen miles "as the crow flies," the telescopic view even reveals the signs on the streets so they may be plainly read. In close range of vision appear Pueblo, Cripple Creek, Victor, Goldfield, Independence, and Manitou.

The surface of the top of Pike's Peak comprises several acres of level land thickly strewn with large blocks of rough granite of varying size, — blocks that are almost wholly in a regular rectangular shape, as if prepared for some Titanic scheme of architecture. The highest telegraph office in the world is located here, and the usual souvenir shop of every summer resort offers its tempting remembrances, all of which are closely associated with the

genus loci, and are all a very part of the Colorado productions. A powerful searchlight was placed on Pike's Peak during the summer of 1906, adding the most picturesque feature of night to all the surrounding country. Denver, Colorado Springs, Pueblo, the Cripple Creek district, the deep cañons of the Cheyenne range, the silvery expanse of Broadmoor, whose attractive casino is a centre of evening gatherings, — all these points in the great landscape are swept with the illumination from the highest searchlight in the world to-day.

A century has passed since Major Zebulon Montgomery Pike first discovered the shadowy crest of the mountain peak that immortalizes his name. It was on November 13, 1806, that the attention of Major Pike and his party was arrested by what at first looked to them as a light blue cloud in the sky, toward which they marched for ten days before arriving at the base of the mountain. The story of this journey is one of the dramatic records in the national archives. Major Pike and his men left St. Louis on July 15, 1806, on his trip to the Rocky Mountains, or Mexican Mountains as he called them at the time. He pronounced the country through which he travelled to be so devoid of sustenance for human beings that it would serve as a barrier, for all time, in the expansion of the United States. In vivid contrast are the conditions to-day. Major Pike could now make his journey from St. Louis to Pike's Peak over

either of several grand trunk railways equipped with all the modern luxuries of travel. Where he passed great herds of buffalo, he would now see cattle grazing in equal numbers on the prairies. The vast plains that paralyzed his imagination by their desolate aspects are now dotted with prosperous farms or ranches. The mountains that appealed to him only for their scenic grandeur have been found to be the treasure vaults of nature that were only waiting to be conquered by the hardy frontiersmen who followed him nearly half a century later. The great white mountain that he declared could not be ascended by a human being is now the objective point of a hundred thousand tourists annually, who gayly climb the height in a swift trip made in a luxurious Pullman observation car. The first attempt of the Pike party to ascend the peak was a failure, and Major Pike expressed his opinion that "no human being could ascend to its pinnacle." In 1819 Hon. John C. Calhoun, then Secretary of War, sent Major Long and a party on an expedition to the Rocky Mountains, then almost as unknown as the Himalayas. This exploring party camped on the present site of Colorado Springs, and on July 13 (1819) started to ascend the peak. On the first day they made only two miles, as the ground was covered with loose, crumbling granite. On the second day, however, they succeeded; the first ascent of Pike's Peak thus having been made on July 14, 1819. A

chronicle of this ascent describes the point above which the timber line disappears as one "of astonishing beauty and of great interest as to its productions." The first woman to stand on the summit of Pike's Peak was Mrs. James H. Holmes, in August of 1858.

General Zebulon Montgomery Pike achieved distinction both as an explorer and a brave soldier. He was but twenty-seven years of age when he was chosen to lead the most important military expedition of the day, and eight years later, as Brigadier-General, he commanded the troops that captured the British stronghold at York (now Toronto), Canada, and here he met his death, which has been compared to that of Nelson. The captured flag of the enemy was placed under the head of the dying general to ease his pain. The cheers of his soldiers aroused the young commander, and on being told that the fort was captured, he closed his eyes with the words, "I die content."

In his notebook were found the maxims that had guided him through life, dedicated to his son, among which were "Preserve your honor free from blemish," and "Be always ready to die for your country."

General Pike was buried with full military honors in the government plot at Madison Barracks, New York. A modest shaft marks the resting place of the heroic soldier-explorer, and on Cascade Avenue in Colorado Springs,

directly in front of "The Antlers," there is placed a statue of the heroic discoverer of the mighty Peak which forever perpetuates his name.

No adequate life of Pike has ever been written; but with the monumental majesty of the mid-continental mountain peak that proclaims his name to all future centuries, what room can there be for biographical record or sculptured memorial? The archives of the Department of War, in Washington, contain his diary, kept from day to day in this march from St. Louis to Colorado. After his discovery of the Peak, Major Pike returned to the place where now the city of Pueblo stands, continuing his journey into the mountains, thence to New Mexico, where he was captured by the Spaniards. Hardships of every description were suffered by the party before being placed in captivity at Santa Fé; but even the capture of his papers by the Spaniards at Santa Fé did not serve to destroy the records of the astute young soldier, who had carefully concealed duplicates of his papers in the barrel of his big flintlock rifle, and he was afterward able to restore them to original form. Major Pike was as tender and humane as he was brave. In the capture of the party by the Spanish two of the men had to be abandoned and left to their fate in the hills. They were given a small supply of provisions, with the assurance that they would be rescued if the rest of the party found a haven of safety and rest. Major Pike kept this promise and, more nearly dead than

alive, these men were brought into Santa Fé by the Spanish soldiers.

Well might it have been of Zebulon Montgomery Pike, in his first eager march toward this "blue cloud" that beckoned him on and proved to be a vast mountain peak, — well might it have been this hero that Emerson thus pictured in the lines:

> "The free winds told him what they knew,
> Discoursed of fortune as they blew;
> Omens and signs that filled the air
> To him authentic witness bear;
> The birds brought auguries on their wings,
> And carolled undeceiving things
> Him to beckon, him to warn;
> Well might then the poet scorn
> To learn of scribe or courier
> Things writ in vaster character;
> And on his mind at dawn of day
> Soft shadows of the evening lay."

In his diary, kept during the march from St. Louis, Major Pike thus pictured his first impressions of Colorado:

"The scene was one of the most sublime and beautiful inland prospects ever presented to man; the great lofty mountains, covered with eternal snow, seemed to surround the luxuriant vale, crowned with perennial flowers, like a terrestrial paradise."

The memory of this hero cannot but invest Colorado Springs with a certain consecration of heroism that be-

comes, indeed, part of the "omens and signs" that fill the air.

In the early autumn of 1906 Colorado Springs and Manitou celebrated the centenary of the discovery of Pike's Peak with appropriate ceremonies. One of the interesting features was the rendering of an "Ode" by a chorus of one thousand voices, of which the words were written by Charles J. Pike of New York, the well-known sculptor, a great-nephew of General Pike, and for which the music was composed by Rubin Goldmark.

One of the noted excursions of the Pike's Peak region is the "Temple Drive," — a carriage road beginning in Manitou, traversing Williams Cañon, and, climbing its west wall. The drive offers near views of the Temple of Isis, the Cathedral of St. Peter, the Narrows, and of St. Peter's Gate in the Cathedral Dome. It is fairly a drive in elfland, and is as distinctive a feature of Colorado Springs life as is the famous drive from Naples to Amalfi and Sorrento a feature of the enchantment of Southern Italy. Manitou Park is easily reached by motor or carriage drive from Colorado Springs through the picturesque Ute Pass, and aside from its beauty it has an added interest in having been presented to Colorado College by General William J. Palmer and Dr. William A. Bell, to be used as the field laboratory of the new Colorado School of Forestry. Manitou Park contains cottages and recreation

WILLIAMS CAÑON, NEAR MANITOU, COLORADO

halls, so that all sorts of hospitalities and entertainments can be there enjoyed.

Of the "Garden of the Gods" who can analyze the curious, mystic spell of the place? A large tract of rolling mesas is covered with these uncanny monsters of rocks in all weird and grotesque forms. The deep red sandstone of their formation gives it the aspect, under a midday sun or the slanting rays of a brilliant sunset, of being all on fire — a kind of inferno, foreign to earth, and revealed, momentarily, from some underworld of mystery.

Cheyenne Cañon is one of the most poetically touched places in all the Pike's Peak region. Of Cheyenne mountain Helen Hunt Jackson wrote:

> "By easy slope to west, as if it had
> No thought, when first its soaring was begun,
> Except to look devoutly to the sun,
> It rises and has risen, until glad,
> With light as with a garment it is clad,
> Each dawn before the tardy plains have won
> One ray, and after day has long been done
> For us the light doth cling reluctant, sad to leave its brow."

Poets and artists have embodied it in song and essayed to transfer it to canvas; but the grandeur of South Cheyenne Cañon eludes every artist while it impresses the imagination of every visitor. It is fitly approached through the "Pillars of Hercules," — sheer perpendicular walls of rock looking up over one thousand feet high, with a passageway of only forty feet. Once within the cañon and one

might as well have been translated to Mars so far as utter isolation can be realized. In the dim green twilight from the lofty wooded cliffs toward the Seven Falls one enters on "the twilight of the gods," not dark, but a soft light, the sun shut out, the air vibrating with faint hints of color, the colossal granite walls rising into the sky, the faint dash of waterfalls heard plashing over hidden rocks and stones; a rill here and there trickling down the mountain side; the far call of some lonely bird heard far away in the upper air; and the soft, mysterious light, the dim coolness and fragrance, the glimpse of blue sky just seen in the narrow opening above — was anything ever so enchantingly poetic? It is here one might well materialize his castle d'Espagne. Winding up the cañon, one comes to "Seven Falls," — a torrent of water rushing down mighty cliffs on one side of a colossal amphitheatre, and the precipitous cliffs show seven distinct terraces down which the foaming torrent plunges.

In North Cheyenne and in Bear Creek Cañons the grandeur is repeated, and in those the people find a vast free recreation ground. This privilege is again one of the innumerable ones that are due to the gifts and grace of General Palmer, who has had this sublime locality made into a practicable resort, with pavilions where tea, coffee, lemonade, ices, and sandwiches are served; a rustic hostelry, "Bruin Inn," is also provided as a place of refuge and entertainment, providing against any disasters in the

SEVEN FALLS, CHEYENNE CAÑON, NEAR
COLORADO SPRINGS, COLORADO

sudden storms that are so frequent in these cañon regions; and the bridle paths, the terraced drives on the mountain walls, and the glades where games may be played, all make South Cheyenne the most unique pleasure resort of that of any city in the United States.

In all these cañons the massive, precipitous granite walls, which seem to rise almost to the sky, are also rendered more arresting to the eye by their richly variegated coloring. These ragged cliffs rise, too, in pinnacles and towers and domes that proclaim their warfare with the elements for ages innumerable. Visitors familiar with all the Alpine gorges and with the Yosemite agree that in no one of these are there such majesty of effects as in the Cheyenne cañons.

Manitou, the Indian name for the Great Spirit, is an alluring place in a nook of the mountains at the foot of Pike's Peak, reminding one of the Swiss-Alpine villages. Ute Pass; Williams Cañon, in which is the noted "Cave of the Winds"; the famous "Temple Drive"; Cascade, Green Mountain Falls and Glen Eyrie are all grouped near Manitou, and it is here that the cogwheel road ascending Pike's Peak begins. The Mineral Springs are approached in a pavilion with two or three large rooms; the auditorium, where an orchestra plays every afternoon, seats some two hundred people, who can listen to the music, sip their glasses of mineral water, and chat with friends, all at one and the same time. There is a foreign

air about Manitou. The little town consists of one street extending along the cañon, following its curves, with a few cottages perched on terraces above, and the hotels, boarding-houses, and the little shops, with the hawkers of curios at their street stands, make up a picturesque spectacle. The shop windows glisten with jewelry made from the native Colorado stones, the amethyst, opal, topaz, emerald, tourmaline, and moonstone being found more or less extensively in this state. The native ores are exposed; Indian wares, from the bright Navajo rugs and blankets to the pottery, baskets, and beaded work; photographs and picture cards of all kinds, and trinkets galore, of almost every conceivable description, give a gala-day aspect to the little mountain town. The surrounding peaks rise to the height of six and eight thousand feet above the street, which looks like a toy set in a region designed for the habitation of the gods. American life, however, keeps the pace, and in this mountain defile at the foot of Pike's Peak were the signs out announcing a "Psychic Palmist," a "Scientific Palmist," and a "Thought Healer," by which it will be inferred that an up-to-date civilization has by no means failed to penetrate to Manitou. Each year the accommodations for travellers multiply themselves. Each summer the demand increases. There is a fascination about Manitou that throws its spell over every visitor and sojourner.

The Grand Caverns are on the side of one of the pic-

turesque mountains, reached by a drive through the Ute Pass. Beyond Rainbow Falls, and entering the vestibule of these caverns, the visitor finds himself under a lofty dome from which stalactites hang, and in which is a pile of stones being raised to the memory of General Grant, each visitor adding one. No form of memorial to the great military commander, whose character was at once so impressive and so simple, could be more fitting than is this tribute. From the vestibule one wanders to Alabaster Hall, where there are groups of snow-white columns of pure alabaster. In a vast space sixty feet high, with a dome of Nature's chiselling and two galleries that are curiously wrought by natural forces, there is a natural grand organ, formed of stalactites, with wonderful reverberations and with a rich, deep tremulous tone. To reveal its marvels to visitors a skilled musician is employed, who renders on it popular selections, to the amazement of all who are present. Another feature of the Grand Caverns is the "jewel casket," where gems encased in limestone reflect the glow of a lamp. There is also the "card room," with its columns and its pictorial effects; the "Lovers' Lane" and the "Bridal Chamber," filled with translucent formations in all curious shapes and hints of color.

The marvellous achievements of the engineer in encircling the mountains with steel tracks on which cars climb to the summit are seen, in perhaps their most remarkable

degree of development in conquering the problems of mountain engineering in Colorado. Of all these achievements, one of the most conspicuous triumphs is that known as the "Short Line" between Colorado Springs and Cripple Creek, a distance of only forty-five miles, and the time some two and a half hours; but within these limits is comprised the most unspeakably sublime panorama of mountain scenery. As the train begins to wind up the mountains one looks down on the flaming, rose-red splendor of the Garden of the Gods, — with its uncanny shapes, its domes and curious formations. Climbing up, the vast plain below — a plain, even though it is six thousand feet above sea level — looks like a sea of silver. The railroad crosses Bear Creek Cañon on a narrow iron bridge and threads its way again on the terraced trunk of the opposite mountain up to Point Sublime,— a gigantic rock towering on a mountain crest. A landscape unfolds that rivals Church's wonderful "Heart of the Andes" in its fascination. Entering South Cheyenne, the beauty and grandeur of the eastern end of the cañon are seen by following the narrow course between its rugged granite sides hundreds of feet in height, reaching a magnificent and most impressive climax at the wonderful Seven Falls. No visit to the Pike's Peak region can be considered complete without this trip through South Cheyenne Cañon.

The usual feature of the situation as trains circle around

ST. PETER'S DOME, ON THE CRIPPLE CREEK SHORT LINE

the rim of these cañons is that their beauty is seen from above. A short stroll and one finds himself between walls towering a thousand feet above his head. The beauty is all around and above. The tops of the mountains seem very far away, and lost in clouds. But in the train the situation is reversed; for, seated in a luxurious observation car of the "Short Line," the tourist is carried above the peaks and cañon walls, which from below seem inaccessible in their height, and from this startling elevation one looks down on an underworld of strange and mysterious forms. St. Peter's Dome, as it is called, looks down from its towering height with the national colors flying from its summit, — a huge mass of granite that seems to stand alone and to guard the secrets of the depths below.

The ascent of St. Peter's Dome is a triumph of engineering skill. As the train glides along, and glory succeeds to glory, vista to vista, and cañon to cañon, in ever changing but constant charm, the dizzy height is climbed apparently with so much ease that the traveller, absorbed in the entrancing surroundings, reaches the top before he is aware of it. It seems impossible that the track seen on the opposite side of the cañon hundreds of feet above should be the path the train is to follow; but a few turns, almost imperceptible, so smooth is the roadbed, and one looks down on the place just passed with equal wonder, and asks if that can be the track by which he has come. As the train climbs the side or rounds the point of each moun-

tain peak, the matchless view of the plains is unfolded before the enraptured gaze. All description is baffled; any attempt to reproduce in words the glory of that scene is impossible. Every tourist in the Pike's Peak region regards the "Short Line" trip as the very crown of the summer's excursions, or, in the local phrase, one whose sublimity of beauty "bankrupts the English language." These forty-five miles not only condense within their limits the grandeur one might reasonably anticipate during a transcontinental journey of three thousand miles, but as an achievement of mountain engineering, railway experts in both Europe and America have pronounced it the most substantially built and the finest equipped mountain railroad in the world. It was opened in 1901, and, quite irrespective of any interest felt in visiting the gold camps of Cripple Creek, the "Short Line" has become the great excursion which all visitors to Colorado desire to make for the sublime effects of the scenery. A prominent civil engineer in Colorado said, in answer to some question regarding the problem of taking trains over mountain ranges and peaks that, given the point to start from and the point to reach, and sufficient capital, there was no difficulty in carrying a railroad anywhere. The rest is, he said, only a question of time and skill. The construction of the "Short Line" reveals the achievement of carrying a railroad around the rims of cañons and over the tops of mountains rather than that of following a

APPROACHING DUFFIELD

trail through the bottom of the cañons. As a scenic success this feat is unparalleled. The bewildering magnificence, the incomparable sublimity, as the train winds up St. Peter's Dome, are beyond the power of painter or poet to picture. Leaving Colorado Springs, the tourist sees the strange towering pinnacles of the Garden of the Gods, in their deep red contrasting with the green background of trees; Manitou gleams from its deep cañon; the towers and spires of Colorado Springs appear in miniature from the far height, and the great expanse of the plateau looks like the sea. It is difficult to realize that one is still gazing upon land. The ascent is more like the experience in an aero-car than in a railroad train, so swift is the upward journey. The first little station on this route is Point Sublime, where the clouds and the mountain peaks meet and mingle. North Cheyenne Cañon is seen far below, and in the distance is fair Broadmoor with its Crescent Lake gleaming like silver. The Silver Cascade Falls sparkle in the air hundreds of feet up the crags. At Fair View the North and South Cheyenne Cañons meet, — those two scenic gorges whose fame is world-wide, — and from one point the traveller gazes down into each, the bottom depths so remote as to be invisible. These precipices are wooded, so that the aspect is that of sheer walls of green. St. Peter's Dome almost pierces the sky, and as the train finally gains the summit a vista of incomparable magnificence opens,

— of cañons and peaks and towering rocks, — and through one cañon is seen Pueblo, over fifty miles distant, but swept up in nearer vision with a mirage-like effect in the air. It is a view that might well enchain one. The Spanish Peaks cut the sky far away on the horizon, and the beautiful range of the Sangre de Cristo Mountains offers a view of wonderful beauty. The road passes Duffields, Summit, Rosemont, and Cathedral Park, at each of which stations a house or two, or a few tents, may be seen, — the homes of workmen or of summer dwellers who find the most romantic and picturesque corners of the universe none too good in which to set up their household gods for the midsummer days. Nothing is more feasible than to live high up in the mountains along the "Short Line." The two trains a day bring the mails; all marketing and merchandise are easily procured; and the air, the views, the marvellous spectacle of sunrise and sunset, the perpetually changing panorama, simply make life a high festival. The little station of Rosemont is a natural park, surrounded by three towering peaks, — Mount Rosa, Big Chief, and San Luis. Clyde is a point much frequented by picnickers. The "Cathedral Park" is an impressive example of what the forces of nature can accomplish. Colossal rocks, chiselled by erosion, twisted by tempests, worn by the storms of innumerable ages, loom up in all conceivable shapes. They are of the same order as some of the wonderful groups of

PORTLAND AND INDEPENDENCE MINES, VICTOR, COLORADO

rocks seen in the Grand Cañon. Towers and arches and temples and shafts have been created by Nature's irresistable forces, and to the strange fantastic form is added color, — the same rich and varied hues that render the Grand Cañon so wonderful in its color effects. This "Cathedral Park" is a great pleasure resort for celebrations and picnics, both from Colorado Springs, Colorado City, Broadmoor, and other places from below, and also from Cripple Creek, Victor, and other towns in Cripple Creek District.

The district of Cripple Creek includes a number of towns, — Victor, Anaconda, Eclipse, Santa Rita, Goldfield, Independence, and others, each centred about famous and productive mines. The first discovery of gold here was made in 1891 by a ranchman, Mr. Womack, who took the specimens of gold ore that he found to some scientific men in Colorado Springs, who pronounced it the genuine thing, and capitalists became interested to develop the mines. In 1891, the first year, the total value of the gold produced was $200,000 ; 1905, the fourteenth year, the value of the production was $47,630,107. The total value of the gold produced in the fourteen years of the camp's existence, to December 31, 1905, was $141,395,087.

There are about three hundred properties in the camp which produce with more or less regularity. Of this number the greatest proportion are spasmodic shippers, mak-

ing their production from the efforts of leasers. There are thirty large mines in the district, each producing $100,000 or more annually. Dividends paid by the mining companies in 1905 amounted to $1,707,000. Total dividends paid to December 31, 1905, $32,742,000. There are employed on an average some six thousand three hundred men in the mines, and the monthly pay-roll runs to about $652,189, exclusive of large salaries paid mine superintendents and managers and clerks in offices. The lowest wage paid in the camp is three dollars per day of eight hours, while many of the miners receive more than that. The average wage per day paid for labor amounts to $3.44. There are twelve towns in the district, with a population of fifty thousand people. During the period of excitement the population was about seventy thousand. The social life of the people is much the same as in other towns.

There is a free school system, with an enrolment of nearly four thousand pupils, with a hundred and eighteen teachers under a superintendent with an assistant. There are thirty-four churches, representing almost every variety of faith.

Cripple Creek, the largest of these, lies in a hollow of the mountains, whose surrounding ranges are a thousand feet above the town. It consists mostly of one long street, with minor cross-streets, and there are little shops with chiffons, "smart" ribbons and laces, and all sorts

VIEW FROM BULL HILL, RICHEST GULCH IN THE WORLD

of articles of dress making gay the show windows, and one sees women and children in all their pretty and stylish summer attire. There are two daily papers and an "opera house." Cripple Creek is a rather favorite point with dramatic companies, as the entire town, the entire district, turns out, and the audiences do not lack in either enthusiasm or numbers.

Mr. William Caruthers, the district superintendent, estimates that this region has become one of the greatest gold-producing regions in the world; and in rapid development, and in the richness of its ores, nothing like it has ever been known before. In fifteen years the cattle ranges have been transformed into a populous district with fifty thousand people, and with all the modern conveniences of Eastern cities.

The electric trolley system connects all the towns in Cripple Creek district and passes near all the large mines. This trolley line is owned and controlled by the "Short Line," and is greatly sought for pleasure excursions both by visitors and residents.

Electric cars convey the miners up and down the hills to their respective mines. The class of laborers is said to be greatly improved of late years, and Mr. Caruthers informs the questioner that no problematic characters are longer tolerated in Cripple Creek. It has ceased to be the paradise of those who, for various unspecified personal reasons, were unable to keep their residence in other cities, or had

left their own particular country for their country's good. When such characters appear, Mr. Caruthers and his staff guide them with unerring certainty to the railroad track, with the assurance that these intruders are wanted in Colorado Springs, and that, although there may be no parlor-car train, with all luxuries warranted, leaving at that moment for their migrating convenience, yet the steel track is before them, and it leads directly to Pike's Peak Avenue (the leading business street of Colorado Springs), and they are advised at once to fare forth on this mountain thoroughfare. The persuasion given by Mr. Caruthers and his assistants is of such an order that it is usually accepted without remonstrance, and the objectionable specimens of humanity realize that their climb of several thousand feet up to the famous gold camps was by way of being a superfluous expenditure of energy on their part.

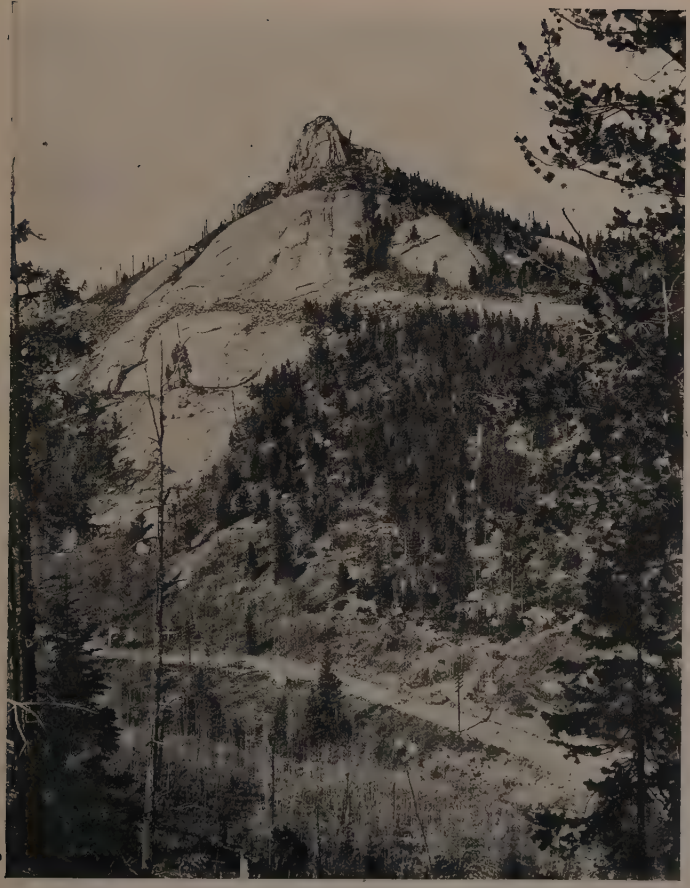
The special entertainment in Cripple Creek is to make the electric circle tour, on electric trolley cars, between Cripple Creek and Victor, going on the "low line" one way, and the "high line" the other. The high line is almost even with the summit of Pike's Peak, that looms up within neighborly distance, and the splendor of the Sangre de Cristo range adds a bewildering beauty to the matchless panorama. On this round trip — a trolley ride probably not equalled in the entire world — one gets quite near many of the famous mines, whose machinery offers a curious feature in the landscape.

Taking the trip in the late brilliant afternoon sunshine along this mountain crest, offers the spectacle of an entire landscape all in a deep rose-pink, gleaming, in contrast with the dark green of the cedar forests, like a tranformation scene on a stage.

The tourist who regards this life as a probationary period, to be employed, as largely as possible, in festas and entertaining experiences, may add a unique one to his repertoire, should he be so favored by the gods; and sojourning in neighborly proximity to the "Garden of the Gods," why should they not bestir themselves in his favor? At all events, if he has contrived to invoke their interest, and finds himself invited by Mr. MacWatters (the courteous and vigilant General Passenger Agent of the "Short Line") to make the return journey from Cripple Creek, down below the clouds to Colorado Springs in a hand car, he will enjoy an experience to be treasured forever. For the hand car runs down of its own accord, by the law of gravitation, and is provided with an air-brake to regulate its momentum. To complete the enchantment of conditions, — and it need not be said that in a Land of Enchantment conditions conform to the prevailing spirit and of course are enchanting, — to complete these, let it be a *partie carrée*, with Mrs. MacWatters, and with Ellis Meredith, the well-known Colorado author, to make up the number; for the keenest political writer in Colorado is a woman, and this woman is Ellis Meredith. It is a

name partly real, partly a literary *nom-de-plume*, and which is the one and the other need not be chronicled here. The name of Ellis Meredith has flown widely on the wings of fame as the author of a most interesting story, "The Master-Knot of Human Fate," which made an unusual impression on critical readers. "The Master-Knot" is an imaginative romance, whose scene is laid on one of the peaks of the Rocky Mountains. It presupposes an extraordinary if not an impossible situation, and on this builds up a story, brilliant, thoughtful, tantalizing in its undercurrent of suggestive interest, and altogether unique.

In her connection with a leading Denver journal Miss Meredith wields a trenchant pen, and one reading these strong and able articles could hardly realize that the same writer is the author of poems, — delicate, exquisite, tender, — and of prose romance which is increasingly sought by all lovers of the art of fiction. With such a party of friends as these, what words can interpret the necromancy of this sunset journey winding down the heights of majestic mountains, amid a forest of towering peaks, and colossal rocks looming up like giant spectres through the early twilight that gathers when the sun sinks behind some lofty pinnacle! The rose of afterglow burned in the east, reflecting its color over the Cheyenne cañons, and even changing the granite precipice of the "Devil's Slide" — a thousand feet of precipitous rock,



THE DEVIL'S SLIDE, CRIPPLE CREEK SHORT LINE

through which the steel track is cut — with a reflection of its rose and amber. Cathedral Park took on a new majesty in the deepening haze. At the foot of one of its tall spires is an ice cavern, which holds its perpetual supply all summer. The solid roadbed, uniformly ballasted with disintegrated granite, built on solid rock for its entire extent, and totally devoid of dust, gives to the hand car the ease and smoothness of a motor on level ground. No one can wonder that this road, built originally to convey coal and other supplies to Cripple Creek, and to bring the ore from the mines to the mills and smelters (a transportation it serves daily), has also, by its phenomenal fascinations, achieved a great passenger traffic made up of the tourists and visitors to Colorado. Even travellers going through to the Pacific Coast make the detour from La Junta to Colorado Springs to enjoy the "Short Line," just as they go from Williams to Bright Angel Trail for the Grand Cañon. With this aërial journey through a sunset fairyland, where the mysterious cañons and gorges lay in shadow and the Colorado sunshine painted pinnacles and towers in liquid gold, what wonder that our poet, discovering her lyre, offered the following "Ode" to the "Short Line":

"There 's the splendor that was Grecian;
There 's the glory that was Rome;
But we know a brighter splendor,
And we find it here at home.

Not the Alps or Himalayas,
Not old Neptune's foaming brine,
Can surpass the wealth of beauty
Of this state of yours and mine.

"All the fairy-tales and legends
Of the time that 's passed away ;
All the scientific wonders
That amaze the world to-day ;
All the artist can imagine,
All the engineer design,
Are excelled in magic beauty
On the Cripple Creek Short Line.

"Oh, those mountains pierce the heavens
Till its radiance glistens through,
And the clouds in golden glory
Float across its field of blue ;
And the soul that may be weary
Feels the harmony divine
Of this wonder-tour of Nature
On the Cripple Creek Short Line.

"There are minarets and towers ;
There are stately domes and fair ;
There are lordly, snow-capped mountains,
There are lovely valleys there ;
And no ancient moated castle,
Frowning down upon the Rhine,
Looks on scenes of greater beauty
Than the Cripple Creek Short Line.

"There 's a vision and a grandeur
When the plains come into view,
And one seems to see the ocean
In the misty rim of blue ;

COLORADO SPRINGS AND TUNNEL NO. 6, CRIPPLE CREEK SHORT LINE

And the eyes of landlocked sailors
With unbidden teardrops shine,
As they see the far-off billows
From the Cripple Creek Short Line.

"There 's a strength and there 's a refuge
In the everlasting hills;
There 's a gleam of joy and gladness
In the leaping sparkling rills;
There 's a benediction sweeter
Than the murmur of the pine,
And it falls on all who travel
O'er the Cripple Creek Short Line."

Ellis Meredith has often pictured in song the charm and romance of Colorado with the vividness and power that characterize her poems which are essentially those of insight and imagination; but in the opinion of many of her admirers she has hardly laid at the shrine of the muses any more felicitous votive offering than this little impromptu.

A summer in Colorado Springs is one that is set in the heart of fascinating attractions. Nor is the Pike's Peak region a summer land alone, for the autumn is even more beautiful, and the winters are all crystal and sunshine and full of exquisite exhilaration and delight in mountain regions that take on new forms of interest. Colorado Springs is not merely — nor even mostly — an excursion city for pleasure-seekers; it is a city of permanent homes, whose residential advantages attract and create its phenomenal growth.

To open one's eyes on the purple line of the Rocky Mountains, with Pike's Peak towering into the sky, in a luminous crystal air that makes even existence a delight, is an alluring experience. To look over the beautiful city of Colorado Springs, with its broad streets and boulevards, and lines of trees on either side; its electric lights, electric cars, well-built brick blocks, churches, schools, and free public library; its interesting and enterprising journalism; to come in contact with the intelligence and refinement of the people, — is to realize that this is no provincial Western town, but instead, a gay and fashionable city, with the aspect of a summer watering place. Manitou, which lies six miles away at the very base of Pike's Peak, and Colorado Springs are connected by electric cars running along the mountain line, and there is a great social interchange. It is simply a whirl of social life in the late summer, and the rapidity with which the guest is expected to flit from one garden party, and tea, and reception to another, within a given time, reminds him of a London season. In the morning every fashionable woman drives to Prospect Lake, and from her bathing in its blue waters to the informal "hop" at night, she is on a perpetual round of gayety if she so desire.

The wide range and freedom of life in Colorado Springs is equally enjoyable. The artist, the thinker, the writer, finds an ideal environment in which to pursue his work.

This beautiful residence city, founded by General Palmer in 1871, has now a population of some thirty thousand, and although lying at the foot of Pike's Peak, it is yet on an elevation of six thousand feet above the level of the sea. Adjoining Colorado Springs is Colorado City, a manufacturing town of five thousand inhabitants, and Manitou, the little town at the immediate base of Pike's Peak, with some two thousand residents, to which, in the summer, is added an equal number of visitors, who bestow themselves in the attractive hotels and boarding-houses or who occupy cottages or camps in the foothills. Colorado Springs was founded in a wise and beneficent spirit. Every deed in the town contains a clause prohibiting the sale of intoxicating liquors, and by the terms of the contract any violation of this agreement renders the deed null and void and the property reverts to the city. Education is made compulsory, and on this basis of temperance, education, and morality the town is founded. It is laid out with generous ideas and with unfailing allegiance to municipal ideals of taste. The avenues are one hundred and forty feet wide and the streets are all one hundred feet wide. Lying midway between Denver and Pueblo, the two largest cities of the state, Colorado Springs is within two hours of the former and one hour of the latter.

Colorado College, a co-educational institution, is largely endowed, and it has from eight to nine hundred students.

Rev. Samuel A. Eliot, D.D., of Boston, the president of the Unitarian Association, was invited to deliver the Commencement Address at this college in 1905, and on this occasion Dr. Eliot said:

"Nothing can surpass the academic dignity of a commencement at a Western State University. The perfection of the discipline would make our elegant, but often distressed, 'master of ceremonies' at Harvard green with envy. At our Eastern Colleges there are still individual idiosyncracies and perverse prejudices and traditions of simpler days to be considered. There are some old-fashioned members of the faculty who just won't wear the academic gown or the appropriately colored hood, and there are always some reckless seniors who will wear tan shoes or a straw hat. Not so in Kansas and Colorado, in Iowa and Nebraska. There every professor and every senior wears his uniform as if he were used to it; each one knows his place and his part and performs it impressively. The academic procession, headed by the regents in their gowns and followed by the members of the various faculties with their characteristic hoods and stripes, and by the senior classes of the college and the various professional schools, is perfect in its orderly procedure, and the commencement exercises themselves are carried through with a solemnity which is sometimes awesome. I caught myself almost wishing that some senior would forget to take off his Oxford cap at the proper time or trip on his gown as he came up the steps of the platform to get his sheepskin, but no such accident marred the impressiveness of the occasion."

Dr. Eliot playfully touches a fact in the social as well as in the academic life of the West in these remarks. The informalities so frequently experienced in recognized social life in the Eastern cities are seldom encountered in the corresponding circles of life in the West, all observance of times and seasons, as calling hours, ceremonial invitations, and driving being quite strictly relegated to their true place in the annals of etiquette. In his Commencement address before Colorado College in 1905 Dr. Eliot said, regarding the several educational schools of Colorado:

"Thus in Colorado the State University is at Boulder, the Agricultural College at Fort Collins, the Normal School at Greeley, the School of Mines at Golden, and so on. The result is not only an injudicious diffusion of energy, but real waste and sometimes deplorable rivalry. Doubtless it is now too late to rectify this mistake. Provincial jealousies and a sense of local ownership are too strong to permit of desirable concentration, and these states are probably permanently burdened with the necessity of sustaining half a dozen institutions which must often duplicate equipment and courses of instruction."

Leading authorities in the Centennial State do not wholly agree with this view. The distribution of an educational centre in one city and part of the state and another in a different part, contributes to the building up

of different cities and to a certain concentration on the part of the students on the special subjects pursued. President Slocum of Colorado College, President Baker of the State University, President Snyder of the State Normal College in Greeley, with other college presidents and their colleagues and faculties, are devoting their lives to the interests of higher education in its broadest and most complete sense; and with their own splendid equipments in learning, their patience and ability in research, their zeal for teaching, and their intense interest in the problems of university life in a new state, they are making a record of the most impressive quality. They are the great pathfinders of the educational future.

Colorado has the advantage of a larger percentage of American population than any other of the Western inland states, there being only twenty per cent of foreign admixture in the entire six hundred and fifty thousand people, — a fact that is especially to be considered in educational progress.

The high school building in Colorado Springs; the court house, costing a half-million dollars; the new city library of Colorado stone; the thirty-five miles of electric railway; a water system costing over a million of dollars; the admirable telephone system, — these and the fine architectural art would render it a desirable residence city even aside from the group of scenic wonders which has made it famous all over the world.

General William J. Palmer, the founder of Colorado Springs, is one of the great benefactors of the state of Colorado. "General Palmer has always been a builder for the future," says a local authority. "His remarkable foresight was best exemplified in the construction of the Rio Grande railroad, — the road which made Colorado famous. Colorado Springs is another monument to his prophetic vision. With an ample fortune he has retired from business life, but is busier than ever with his many philanthropies, all of which have an eye to the future.

"At great expense he has abolished Bear Creek toll-gate, and has constructed a wonderful carriage road through this beautiful cañon, and will give it to the people as a permanent blessing."

This Bear Creek Cañon lies north of Cheyenne Cañon — about five miles from Colorado Springs. The road winds back and forth in a zigzag elevation, with new vistas of enchantment at every turn, — towering mountains, the Garden of the Gods, — that strange, weird spectacle, St. Peter's Dome, Phantom Falls, Silver Cascade, Helen Hunt Falls, and other points of romantic beauty.

Colorado Springs has a great park system at a cost already of three hundred thousand dollars, and with the buildings and other features projected the cost will be hardly less than half a million. There are to be floral gardens, an Italian sunken basin with a fountain rising in streams, after the fashion of the fountains of Versailles,

— and an art gallery is soon to be added to this lovely and enterprising city. Already the city has Palmer Park, — comprising eight hundred acres, donated by the generous and beneficent General Palmer, — a park that contains Austin's Bluffs, from which a magnificent view is obtained.

It is to General Palmer that all the charming extension of terraced drives and walks in North Cheyenne Cañon is due, — the road often terraced on the side of the mountain; and here and there little refreshment stands, where a sandwich, a glass of lemonade, a cup of tea may be had, are found in these wild altitudes. In Palmer Park one portion has been appropriately named Statuary Park, from the multitude of strange forms and figures that Nature has chiselled in the sandstone. Gray's Peak, like a dim shadow on the far horizon to the north, and the faint, beautiful outline of the Spanish Peaks to the south, are seen from this park, while the massive portals of the "Garden of the Gods" in their burning red are near, and at one side the rose pink rocks of Blair Athol.

General Palmer's residence in Glen Eyrie is one of the poetic places of the world. The romantic environment of mountain cañons, towers, and domes of the fantastic sandstone shapes, and overhanging rocks that loom up thousands of feet on a mountain side, impart a wild charm that no words can picture. The architectural effects have been kept in artistic correspondence with the romantic scenery.

Monument Valley Park is the latest of General Palmer's munificent gifts to Colorado Springs. It was a tract of low waste land some two miles in length and covering an area of two hundred or more acres, but its transformation into the present beautiful park is the realization of an Aladdin's dream. An artistic stone drinking-fountain; a wide vista of trees relieved by a low Italian basin with fountains; Monument Creek, made to be sixty feet wide between its banks; the creation of artificial lakes; and there are included in the scheme conservatories, rustic pavilions, and botanical gardens. This park is one of the most extensive improvements in decorative effect, that is known in any city.

Monument Park is distinctive from Monument Valley Park, the former lying some ten miles from the city, and it is picturesque beyond words.

The "Garden of the Gods" has achieved world-wide fame. The "Gateway," the "Cathedral Spires," "Balanced Rock," and other singular formations fascinate the visitor and draw him back again and again. A local writer thus describes the majestic "Gateway":

"Two immense slabs of red sandstone, soft and beautiful in their coloring, tower over three hundred feet high on either side and seem to challenge the right of the stranger to enter the sacred portals. Napoleon, at the Pyramids, sought to impress his soldiers with the thought that from that eminence four thousand years looked down upon them. But from here

geological ages of untold length look down upon the beholder. In close proximity may be found limestone, gypsum, white sandstone, and red sandstone, each representing a different geological era, and each, in all probability, representing millions of years in its formation."

The "Garden of the Gods" represents one of those inexplicable epochs of Nature's creations as does, only in a more marvellous degree, the Grand Cañon and the Petrified Forest. A scientist says of these grotesque shapes that "their strangely garish colors, red and yellow and white, in enormous masses, lofty buttresses, towers and pinnacles, besides formations of lesser size, in fantastic shapes, that readily lend themselves to the imagination, are sedimentary strata, which once lay horizontally upon the mountain's breast, but that some gigantic convulsion of nature threw them into their present perpendicular attitude, with their roots, as it were, extending hundreds of feet underground. The erosion of water, when this was all the Gulf of Mexico, accounts for the shaping.

"The gateway to the Garden is really the grandest feature, rising perpendicularly on either side twice the height of Niagara, and framing in rich terra cotta a most entrancing picture of the blue and tawny peak, apparently only a little way on the other side."

Any writer on Colorado Springs is embarrassed by the fact that the great founder and benefactor of the city

GATEWAY OF THE GARDEN OF THE GODS,
COLORADO SPRINGS, COLORADO

CATHEDRAL SPIRES, GARDEN OF THE GODS,
COLORADO SPRINGS, COLORADO

has requested that his name is not to be recorded in connection with his great and constant gifts to the municipality; and while it is far from the desire of any one to disregard the expressed wish of a man whose modesty is as great as is his munificent generosity, it is yet impossible to tell the story of Colorado Springs without perpetual references to her distinguished citizen, her great and noble benefactor and founder. It is not too much to say that there is probably not, in the history of the United States, an instance parallel to the story of General Palmer and Colorado Springs. Yet beyond this bare mention, in which one even thus records that which General Palmer has wished to have had left without reference, one is under bonds not to go. The Recording Angel may not be so plastic to the expressed preferences of the wise founder and the munificent benefactor of the charming city; and the vast and generous gifts, the noble character of the citizen whose life and example is the most priceless legacy that he could bequeath to Colorado Springs, however priceless are his long series of gifts, — these are inevitably inscribed in that eternal record not made with hands, on whose pages must ever remain, in shining letters, the honored name of General William J. Palmer, whose energy and whose lofty spirit have invested this beautiful centre of the picturesque region of Pike's Peak with the spell of an enchanted city lying fair in a Land of Enchantment.

CHAPTER IV

SUMMER WANDERINGS IN COLORADO

"God only knows how Saadi dined;
Roses he ate and drank the wind."
EMERSON

DEEP in the heart of the Rocky Mountains lies Glenwood Springs, a fashionable watering place, where a great hotel, bearing the name of the Centennial State, with every pretty decorative device imaginable, allures the summer idlers, and where various kinds of springs and baths furnish excuse for occupation. All varieties of invalidism, real or fancied, meet their appropriate cure. One lady declared that the especial elixir of life was found in a hot cave that yawns its cavernous and mysterious depths in an adjacent mountain. Another continued to thrive on (or in) the sparkling waters of "the pool," which is, for the most part, a dream of fair women, relay after relay, all day and evening, swimming about after the fashion of the Rhine sisters; and those who do not take kindly to the pool or the dark and "hot" cave fall upon some particular geyser and appropriate it for their own. Woe to the woman who interferes with another woman's geyser! The whole region around Glenwood Springs is phenomenal. A hot sulphur

spring boils up at the rate of twenty thousand gallons a minute. The "pool" — where the Rhine maidens are forever floating, morning, noon, and night — covers over an acre, and is from three to six or seven feet deep. Two currents of water are constantly pouring into it, — the hot (at one hundred and twenty-seven degrees) at a rate of ten thousand gallons a minute, and the cold from a mountain stream. A stream constantly runs from it, a part of which is utilized as a waterfall in the centre of the large dining-room of the hotel. On one bank of this pool is a colossal stone bathhouse (costing over one hundred thousand dollars), where every conceivable variety of the bath is administered, and from which "the pool" is entered. In warm evenings, when the full midsummer moon peeps over the mountains, the groups of girls, one after another, begin mysteriously to disappear, and in reply to a question as to the destination of this evening pilgrimage one bewitching creature in floating blue organdie, as she flitted past, laughingly answered, "Come to the pool and see." There was no time to be lost. The moon in silver splendor was climbing over the mountains, and the girls emerged from their dainty evening gowns to array themselves in bathing suits. A few minutes later they were to be seen at this mysterious trysting place at "the pool," the only difference being that some were outside and some inside. Surely those inside had the best of it. How can the scene be pictured? From the broad piazza of the hotel

a terraced walk ran down through the greenest of lawns, with shade trees and a fountain resplendent in colored electric lights. The pool lies in an open glade. Not far away is one of the ranges of the Rocky Mountains, over which the August moon was climbing. Tall electric lights mingled with the moonlight, giving the most curious effects of chiaroscuro through the glade and the defiles of the mountains. On one side of this immense natatorium rose the vast stone bathhouse, — a beautiful piece of architecture. Near by the round sulphur spring boiled and bubbled in a way to suggest the witches' rhyme:

> "Double, double toil and trouble;
> Fire, burn; and, cauldron, bubble."

A high toboggan slide in one place descended into the pool, and was much used by the young athletes, — the men, not the girls. In the pool a natural fountain of cold water shot high in the air. The swimmers abounded. Those who were unable to swim would cling to a floating ladder. Here in the moonlight the girls — clinging two and three together — circle around in the water, needing only the melody of the Rhine sisters to complete the illusion of one of the most enchanting scenes in the entire Wagner operas.

Rev. Frederick Campbell wrote of this unique place:

"There is but one word to utter at Glenwood Springs — 'Wonderful!' If one enjoys life at the most luxurious of

hotels, here it is at Hotel Colorado. Built in the Italian style of peach-blow sandstone and light brick, lighted with electricity, a searchlight reaching from one of its towers at night and lighting the train up the valley, a powerful fountain supplied from the mountain stream up the cañon pouring the geyser 170 feet straight in the air, and views, views everywhere."

The hot cave is as wonderful as anything around Sorrento or Amalfi. In fact, all Colorado reminds the traveller of Italian scenery. It has been called the Switzerland of America, but it is far more the Italy. It has the Italian sky, the Italian coloring, and the mysterious and indefinable enchantment of that land of romance and dream. The volcanic phenomena is often startlingly similar to that of Italy. This hot cave at Glenwood Springs is of the same order as those on Capri and the adjacent coasts of Italy. In this cave at Glenwood hot air continually comes up from some unknown region, and it is utilized for curative purposes. The two or three caves have been made into one, a cement floor laid, and marble seats with marble backs put in (the ancient Romans would have found this a Paradise). Here come — not the halt or the blind, but the people who take "the cure." The process is to sit on the marble seat with a linen bag drawn completely over the entire form, with a hole for the head to emerge. Around the neck is placed a towel wrung out of cold water. To see a cave filled with these modern

mummies, sitting solemnly, done up in their linen cases, like upholstery covering, is a spectacle. The men go in the morning, the women in the afternoon. One lady obligingly gave the data of her "cure." Twice a week she migrated in negligée to the hot cave, and sat done up in her linen covering, bathing in the hot air at one hundred and twenty degrees or so. Other afternoons were devoted to the hot sulphur water bathing, and what with the various gradations of temperature and the work of the attendants, the cup of Turkish coffee and the siesta, the process consumed the entire afternoon. It is bliss to those who delight in being rolled up like a mummy and sitting still. But if it were chasing a star that danced, if it were riding on a moonbeam, if it were dancing with the daffodils, — if it were anything in all the world that was motion, — then it might have some fairer title to charm. The felicity of lying about in a state of inertia is in the nature of a mystery. And one questions, too, whether the spring of life is not, after all, within rather than without. Let one take care of his mental life and the physical will, very largely at least, keep in spring and tune without elaborate and expensive processes of propping it up. To disport one's self in the pool, — there is a delight. Who would n't be a Rhine maiden under the midsummer moon in the heart of the Rocky Mountains?

In nearly all the cañons and caves of this surrounding region are found traces of the prehistoric peoples who

THE WALLS OF THE CAÑON, GRAND RIVER

inhabited them. Fragments of pottery, in artistic design and painted in bright colors, are numerous; relics similar to those found in the cliff houses are not unfrequently chanced upon in walks and excursions and the stone implements abound. The ethnologist finds a great field for research in all this Glenwood Springs country. There are carriage roads terraced along the base of the mountains where drives from five to twenty miles can be enjoyed in the deep ravines where only a glimpse of blue sky is seen above, and the saunterer finds a new walk every day. The mountains branch off in every direction, and the lofty peaks silhouette themselves against the sky. It is like being whirled up into the air. The sensation is exhilarating beyond words. If people could take "cures" getting up into sublime altitudes like this, where the views are so heavenly that one does not know where earth ends and Paradise begins, — that would be a cure worth the name. Really, it is vitality and exhilaration that one wants, and it is to be found in the air far more than in any other element.

> "'T is life whereof our nerves are scant;
> 'T is life, not death, for which we pant,
> More life and fuller that I want."

The Denver and Rio Grande Railway is well called "the scenic line of the world." From Denver to Pueblo it runs almost due south, across a level valley, with perpetually enchanting views of the mountains and curious rock formations, between Denver to the region below

Colorado Springs. From the great smelting city of Pueblo, "the Pittsburg of the West," the road turns westward, on an upward grade, till it reaches Cañon City, and from there to Glenwood Springs this road is a marvel of civil engineering. Up the narrow, deep cañons of Grand River, through the towering granite cliffs, it winds, on and up, passing Holy Cross Mountain, offering at every turn new vistas of sublime and wonderful beauty. To take a day's ride through such scenery, with the luxurious comfort of the most modern Pullman cars, and a good dining-car constantly with the train, is to enjoy a day that lives in memory. Not the least of the attractions of Glenwood Springs is the enchanting route by means of which one arrives in this picturesque region. As the train climbs up to plateau after plateau in the mountains the scenes are full of changeful enchantment. The formation is interesting, — a deep cañon, with rock cliffs apparently towering into the sky, and then the emerging on a great level plateau. All along this route, too, are those wonderful sandstone formations that have made the "Garden of the Gods" so marvellous a place. Between Cañon City and Glenwood Springs the very dance of the Brocken is seen in Sandstone sculptures.

Near the summit of Iron Mountain, which is in the immediate vicinity, the "Fairy Caves" rival the famous "Blue Grotto" of Capri in attraction. These caves (less than a mile from the Hotel Colorado) are a most

THE "FAIRY CAVES," COLORADO

intricate and wonderful series of subterranean caverns, grottos, and labyrinths, with translucent stalactites and stalagmites, and they are all lighted by electricity, — a great improvement on the sibyls' cave, where the sibylline leaves were read. The oracles of that time were sadly lacking in conditions of modern conveniences. The sibyl had not even a telephone. We do things better now, and run electric cars up to the Pyramids. Nor did the sibyl of old have a tunnel two hundred feet long, by which her votaries could approach the scene of her oracles; but visitors to the Fairy Caves may pass by means of this tunnel to one of the grandest and most awful precipices in the Rocky Mountains, where they step out upon a balcony of stone into the open air, with a perpendicular wall of rock one hundred feet high, above, and an almost perpendicular abyss, down, twelve hundred feet below. Standing on this balcony, nothing can be seen behind but sheer perpendicular ascent and descent of rock; but in front and far below may be seen the Grand River, appearing as a brook, winding in and out among the projecting mountains, visible here like burnished silver, and lost there, only to reappear again at a point far distant.

At this high elevation the opening of the cañon of the Grand is seen in all of its majesty, — the massive mountains projecting against each other in their outlines, and the lofty peaks reaching to the skies. The Denver and

Rio Grande Railway is at the foot of the cañon, — a mere winding line, as seen from this Titanic height.

The Colorado Midland Road also runs through Glenwood Springs, whose phenomenal hot caves and luxurious and elaborate bathhouse have given it European fame. The twin towers of the hotel remind one of Notre Dame, and the views from these are beautiful. The design is after the Villa Medici in Rome, — the same motive repeated for the central motive of this superb Hotel Colorado with its towers and Italian loggias and splendid spacious piazzas, and its searchlight from one of the towers, illuminating the evening trains that pass in the deep cañon of Grand River. Here is a region that might be that of Sorrento and Capri.

In Glenwood Springs the traveller may meet Mrs. Emma Homan Thayer, the author of "Wild Flowers in Colorado," published in both London and New York. Mrs. Thayer was a New York girl, one of the original founders of the Art League, and the daughter of an enterprising and well-known man. She is an artist by nature and grace, — sketches, paints, and writes, and in both painting and literature she has made a name that is recognized, and she has charmingly perpetuated in her book the unique and wonderful procession of Colorado wild flowers.

Lookout Mountain, rising some twenty-five hundred

MARSHALL PASS AND MT. OURAY, COLORADO

feet above the town, has an easy trail to its summit; the driving is picturesque and safe on terraced mountain roads with perpetual vistas of beauty, and many lakes in the vicinity — Mountain, Big Fish, Trappers' Lake, and others — offer excellent fishing. The hotel grounds at night are transformed into a veritable fairyland. The fountains shoot their jets of water up hundreds of feet into the air, with a play of color from electric lights thrown over them until they are all a changeful iridescent dream of rose and emerald and gold mingled with blue, — the very rainbows of heaven reproduced in mid-air.

The journey up the "scenic route" has one point especially — that at the base of the Holy Cross Mountain where the train climbs from plateau to plateau — that enchants the imagination. The vast mysterious cañons lie far below, steeped in the twilight of the gods. The air shimmers with faint hints of color. Above, the towering granite walls seem to cut their way into the sky. The faint plash of a thousand waterfalls echoes from the rocky precipices, and the faint call of some lonely bird hovering over a pinnacle is heard. The mysterious light, the dim coolness and fragrance, the glimpses of blue sky seen through the narrow openings of the cañons above all, combine to produce that enchantment — the "Encantada," — that Vasquez de Coronado felt when he first beheld this marvellous country.

Emerson asserts that life is a search after power, —

"Merlin's blows are strokes of fate."

It is apparently a twentieth-century Merlin who has dreamed a dream of wresting electricity from the mountain currents to utilize as power to create a new field for industrial energy. The electrical engineer, who is the magician of contemporary life, demonstrates that not the volume of a stream, but rather its "fall," is the measure of its possibilities of power, and no country is so rich in water that comes tumbling down from the heights as is Colorado. The wild streams that precipitate themselves down the mountain-sides are as valuable as are the veins of gold that permeate the mountain. Science has now taken them in hand, and will not longer permit these torrents and waterfalls to run to waste or to display themselves exclusively as decorative features of the mountain landscapes. The General Electric Company is utilizing these falling waters, and is already achieving results with their transformation into power which are beyond the dreams of imagination. The Silver Cascade, which for ages has had nothing to do but leap and flash under the shimmering gold of the Colorado sunshine, suddenly undergoes

"a sea change
Into something new and strange."

It becomes an important factor in the world's work. For instance, in lovely Manitou, — the little town that dreams

at the foot of Pike's Peak and which seems made only for stars and sunsets and as the stage setting of idyllic experiences, — in lovely Manitou an hydro-electric plant has been for more than a year in successful operation; and an opportunity is thereby afforded the interested observer to see the practical working of an enterprise that draws its energy directly from nature's sources. The power is obtained from water that is stored in a reservoir situated far up on the side of the peak. Three and one-half miles of pipe were used to carry the water from the reservoir to the plant. The water has a fall of twenty-three hundred feet, which is much more than is needed to turn the giant wheels that furnish the power to be distributed to Colorado Springs, Colorado City, and the surrounding country. The mills at Colorado City use this power exclusively, and the cheapness at which it can be furnished is a potent factor in making for the success of their operation.

At Durango the Animas Power and Water Company has installed a plant for hydro-electric energy which will furnish power to the entire San Juan county. The plant comprises two three-thousand horse-power current generators and the station appliances that correspond with these; and from this plant extend fifty-thousand volt circuits to all the large mines near Ouray, Silverton, and Telluride. The "Camp Bird," the "Gold King," the "Silver Lake," the "Gold Prince," and the "Revenue Tunnel" mines all draw from this plant for their entire milling and mining work.

To harness the cascades, which for ages have known no sterner duty than to sparkle and frolic in the sunshine, to force the water sprites and nixies to perform the work of thousands of horse-power, is the achievement of the modern Merlin.

The Platte River Power and Irrigation Company are about to establish two electrical power enterprises most important to Denver, one of which is to supply all the power that is necessary to turn every wheel now in motion in the city, and the second is to secure electric power from the water that is stored in the Cheesman dam and transmit it to Denver. Responsible men are working for the success of the enterprises, and it is anticipated that Denver will soon enjoy the advantage of power furnished at a minimum of cost.

The Denver inter-urban service for transportation will be carried on entirely by electricity within the near future. All the railroads that centre in this City Beautiful are preparing estimates and making ready to conduct experiments. The recent tests in the East of electrically driven locomotives indicate that Colorado, with Denver as a centre, will one day be a network of electric lines traversing productive regions and connecting all the prosperous towns of the state by this most ideal form of transit.

In Colorado it is one of the unwritten laws — a law from which there is no appeal — that nothing which is desirable is impossible. This is one of the spiritual laws,

indeed, and he who holds it as an axiom shall perpetually realize its force and its eternal truth. The entire physical world is plastic to the world of spirit. In that realm alone realities exist. For "the things which are seen are temporal; but the things which are not seen are eternal." The faith that stands — not "in the wisdom of man, but in the power of God" — is that which shall be justified by the most profound actuality. It is that hidden wisdom "which God ordained before the world unto our glory." Science has already discerned the connection between organic form and super-space; and speculations already begin to emerge from the dim and vague region of conjecture into hypothesis and theory out of which are developed new working laws of the universe which are as undeniable as is that of the law of gravitation.

In harmonious accordance, then, with that unwritten law of Colorado that nothing which is desirable is impossible, it was realized that the Gunnison River, a powerful stream thirty miles east of the Uncompahgre, afforded an abundance of water to reclaim these desert wastes to the traditional blossoming of the rose. The Gunnison River, however, flows through a box cañon three thousand feet deep. Were it at the bottom of a gorge three thousand miles deep, that fact would hardly daunt the Colorado spirit. Immediately some invention, incomprehensible to the present mind of man, would be made by which the desirable issue should be achieved. As has been remarked, failure is a

word not included in the vocabulary of Colorado. That state has a "revised version" of its own for the resources of its language, laws, and literature. Its keynote is the invincible. Ways and means are mere matters of minor detail. If an achievement is desirable, it is to be accomplished, of course. It is not even a question for discussion. There is no margin of debatable land in the realization of every conceivable opportunity.

A stupendous work in development is that of this Gunnison Tunnel under the Vernal Mesa to Uncompahgre Valley, — a desert waste whose area comprises some one hundred thousand acres of sand, sagebrush, and stones. Yet even here irrigation worked its spell, and while the Uncompahgre River held out a water supply, the land reached proved fertile beyond expectation. But the Uncompahgre had its far too definite and restricted limits; no other water supply was available for this region, and there lay the land — a tract of potential wealth, but destined to remain, so far as could be seen, an unproductive and cumbersome desert region unless irrigation could be achieved.

To the constructing engineer of the reclamation service there came a telegram from the chief engineer in Washington asking if it were feasible to divert the waters of Gunnison River to Uncompahgre Valley by means of a tunnel under Vernal Mesa? This implied building a tunnel from a point totally unknown. No one had ever

succeeded in passing through Gunnison Cañon. But the past tense does "not count," any more than Rip Van Winkle's last glass, in any estimate of the present in Colorado. Professor Fellows, an engineer of Denver, selected his assistant; they prepared their instruments, their provisions, and their inflated rubber mattress, and set forth on this expedition in which their lives were in constant peril; in which hardships beyond description were endured. The topographic map, for instance, was made by Mr. Fellows in the delightful position of being lowered with ropes into the deep cañon where, should the slightest accident occur, he would never return to the day and daylight world again. The establishment of precise levels for both ends of the tunnel, one of which must, of course, be lower than the other to induce a flow of water, was another matter requiring a delicacy of adjustment beyond description. Of their wonderful and even tragic experiences a local report says: "It all ended by Fellows and his companion saving two things, — their lives and their notebooks. Everything else went down with the flood. When the men emerged at the Devil's Slide, weary, bruised, and bleeding, friends who had been waiting to pick up their mangled bodies hailed them as if they had returned from the dead."

Of all this story there was no hint in the cheerfully laconic telegram despatched to Washington, — "Complete surveys for construction." The tunnel will be five or six

miles in length, of which over two miles are already completed. The work proceeds night and day with the drills like mighty giants eating their way through the solid granite of the Vernal Mesa that lies between the two rivers. This desert region which will thus be reclaimed comprises portions of three counties, — Ouray, Montrose, and Delta, — the region being at an altitude of five thousand feet. It easily produces fruit, alfalfa, and grain, and it is also well adapted to the culture of potatoes, celery, and the sugar beet. The land when irrigated is estimated to be worth five hundred dollars per acre. The tunnel will have a capacity for conveying thirteen thousand cubic feet of water per second, and there will be connected with it an elaborate system of lesser canals and ditches that will carry the water all over this desert tract. It is estimated that this enterprise will add thousands of homes to the valley of the Uncompahgre, and that it will increase by at least ten millions the taxable property of Colorado. The cost of the Gunnison Tunnel will be some two and a half millions.

Uncompahgre Valley, lying between the Continental Divide on the east, and the Utah Desert on the west, comprises the greatest extent of irrigable land west of Pueblo in the entire state; but the need for irrigation and the possibilities of supplying that need were so widely apart that even Merlin the Enchanter recognized the difficulty, though by no means defining it as an impossibility. The Uncompahgre River was soon exhausted, and

only this apparently impracticable scheme, now happily realized, offered any solution of the problem. Hon. Meade Hammond of the state legislature of Colorado secured the appropriation of twenty-five thousand dollars to meet the expenses of surveying and preliminary work. Hon. John C. Bell, the representative for that district in Congress, gave untiring devotion to the project, and to his efforts was due the zeal with which the reclamation service took up this vast work; and when Professor Fellows was appointed as the government district engineer its success became the object of his supreme interest and unremitting energy, and its achievement adds another to the remarkable engineering works of Colorado.

In this Land of Enchantment almost anything is possible, even to yachting, — a pastime that would not at first present itself as one to be included among the entertainments of an arid state which has to set its own legislative machinery and that of Congress in motion in order to contrive a water supply for even its agricultural service; nevertheless, on a lake in the mountains, more than a mile and a half above sea level and some one hundred miles from Denver the Beautiful, a yacht club disports itself with all the airy grace and assurance of its ground — one means of its water — that distinguishes the delightful Yacht Club at old Marblehead on the Atlantic Coast. There was, however, no government appropriation made to create this lake, as might at first be supposed, nor any experts sent out

commissioned to prepare the way. There are numerous forms of summer-day entertainments that are more or less in evidence in the inland states; but yachting has never been supposed to be among them, as preconceived ideas of this joy have invariably associated it with oceans and seas. Still, it must be remembered that Colorado is an exceptional region in the universe, and creates, not follows, precedents. It is the state, as has before been remarked, to which nothing conceivable is impossible.

Grand Lake is in Middle Park, sixty miles from the nearest railroad station. (With the incredible celerity with which life progresses in the Centennial State, of course by the time this description is materialized in print Grand Lake may have become a railroad centre — who shall say? It is not safe to limit prophecy in Colorado.) At present, however, a railroad journey of forty miles from Denver, supplemented by sixty miles of stage, brings one to the lake, a beautiful sheet of water two miles in length and more than a mile in width, whose water is icy cold. The locality has become something of a summer resort for many Denver people, and also, to some extent, to those from Chicago and Kansas City, and a group of cottages have sprung up. Some seven years ago the Grand Lake Yacht Club was duly organized, with Mr. R. C. Campbell, a son-in-law of Senator Patterson of Colorado, Mr. W. H. Bryant, a prominent citizen of Denver the Beautiful, Major Lafayette Campbell, and other well-

THE WONDERFUL HANGING LAKE, NEAR
GLENWOOD SPRINGS, COLORADO

known men, as its officers. The club has now a fleet of yachts; it has its regatta week, and altogether holds its own among nautical associations; it takes itself seriously, in fact with what Henry James calls the "deadly earnestness of the Bostonians," which is paralleled by this inland and arid-land yachting club.

Besides the joys of yachting in an arid state where that nautical pastime is apparently carried on in mid air, is the local diversion of climbing mountain peaks that are pronounced impossible of ascension. This is one of the favorite entertainments of Colorado young women, who have conquered Long's, Gray's, Pike's, and Torrey's peaks, Mount Massive, the "Devil's Causeway," and various lesser heights, which they scale with the characteristically invincible energy of their state. The summit of Mount Massive is fourteen thousand five hundred feet above sea level, and of one of these expeditions a Denver journal says of this party of several ladies and gentlemen:

"Camp was struck at Lamb's ranch, where, in the early morning, the wagon was left with all the outfit not absolutely necessary. The trail sloped steadily to the boulder field, where the party stopped for lunch. They were now at an altitude of twelve thousand feet. A cold wind swept across the range and chilled them, so that the climb was soon renewed.

"The boulder field is two miles long and seemed five, for walking over the great stones is a wearisome business. At the

end of the boulder field, which is much like the terminal range of an old glacier, is a great snowbank. From a long distance the mountain climbers saw the keyhole, — a deep notch of overjutting rock through which goes the only trail to the summit of Long's. It is a gigantic cornice to a ridge that extends north from the main cone.

"After passing the keyhole, which had loomed up before them through weary miles of tramping, a great panorama of mountains stretched before them. . . . There was a precipitous slope of rocks jammed together in a gulch. This rises for about seven hundred feet, every inch stiff climbing.

"The danger at this point was that some climbers might dislodge rocks which would come bounding down on the heads of those in the rear. For this reason the orders of the leader were urgent that the party should not get separated. The trail at this point led up the sharply sloping eaves of the mountain roof, from which the climber might drop a dizzy distance to the depths below. Clinging to the rocks and hanging on by hands or feet, the party pushed up to a ledge from which they looked over an abyss several thousand feet sheer down."

In Southern Colorado the cliff-dwellers' region offers some of the most remarkable ruins in America, and their preservation in a government reservation, to be known as the Mesa Verde National Park, has been assured by a bill that has been recently passed by Congress and which is one of the eminent features of latter-day legislation. It is Representative Hogg who introduced this bill providing

for the permanent protection of those cliff-dweller ruins which, with those in New Mexico and Arizona, constitute some of the most valuable and interesting prehistoric remains in the United States. Already much of this archæological treasure of inestimable scientific value has been carried away by visitors, while, instead of permitting this region to be thus despoiled, it should be made easily accessible to tourists and held as one of the grand show places of the great Southwest. Like the Grand Cañon and the Petrified Forests of Arizona, like the Pike's Peak region in Colorado, Mesa Verde would become an objective point of pilgrimage to thousands of summer tourists. In the winter of 1904–5 Representative Lacey, of Iowa, the eminent chairman of the House Committee on Public Lands, made in behalf of his committee a favorable report on the Colorado Cliff-dwellers' Bill, presenting, with his characteristic eloquence of argument, the truth that the permanent preservation of these wonderful and almost prehistoric ruins is greatly to be desired by the people of the Southwest, as well as by those interested in archæology elsewhere. "The ruins are situated among rocky cliffs, and may be easily preserved if protected," said Mr. Lacey, and added:

"With the exception of two or three small, fallen, and totally uninteresting ones, all the ruins of the Mesa Verde are in the Southern Ute Indian Reservation. It is an extremely arid region, and little or no agriculture is practised

by the Utes, although they range sheep, goats, cattle, and ponies on the mesa and in the cañons. It is a poor range at best, and the Indians appear to need all they can get. Moreover, the reclamation service has made some estimates regarding storage reservoirs in the upper Mancos, and it may be at some future time a part of this land in the reservation will be irrigable and greatly increased in value. The Utes are not going to destroy these ruins or dig in them. They stand in superstitious awe of them, believing them to be inhabited by the spirits of the dead, and cannot be induced to go near them."

These dwellings are excavated in cliffs from five to nine hundred feet above the plateaus. Of these, two dwellings stand out prominently, — the "Spruce Tree House" and the "Balcony House," the former of which contains a hundred and thirty rooms, of each of which the average measurement is about eight by six feet. Much pottery, weapons, armament, and many skeletons and mummies are found in these dwellings.

The later conclusions of scientists are that these cliff-houses were designed as places of refuge and defence rather than as ordinary habitations. The parallelogram and circle forms predominate, and they are often forty feet in diameter. There are sometimes double, or even triple walls, solidly built of hewn stone, with a circular depression (council-chamber) in the centre.

Pueblo is the metropolis of Southern Colorado. It is

the second city in the state, ranking next to Denver. It is an important industrial centre, being the location of the great steel works of the Colorado Fuel and Iron Company, and two large smelting plants in constant activity. It is a town with unusual possibilities of beauty, rambling, as it does, over the rolling mesas with a series of enchanting vistas and mountain views of great beauty. The Spanish Peaks are in full sight from the new residence region of Pueblo, and here is the home of ex-Governor and Mrs. Alva Adams, with its spacious, book-lined rooms; its choice and finely selected souvenirs of foreign travel; its music and pictures; and far above all, the gracious sweetness and charm of Mrs. Adams, who has that most perfect of gifts — that of transforming a household into a home. Governor Adams, although in his modesty he would deprecate the distinction, is easily the first citizen of Colorado. Twice the Governor of the state, he has impressed the entire people with his flawless integrity of character, his noble ideals, and his energy of executive power in securing and enforcing the best measures for the people and carrying onward into practical life the highest moral and educational standards.

Governor Adams is always greatly in demand as a speaker, and in September of 1906 he was again nominated for Governor of the state.

Colorado, quite irrespective of party, is all aglow with the name of Alva Adams. Good Republicans have

long been greatly perplexed over the fact that the man they most desire to vote for, the man to whose guidance they would most willingly commit the affairs of state, is a Democrat. The ability, the unquestioned integrity, the fidelity to lofty ideals, and the great administrative power of Governor Adams inspire the almost universal enthusiasm of Colorado irrespective of party lines.

No son of the Centennial State is more in sympathy with its individual problems. Born in Wisconsin (some fifty-five years ago), Governor Adams was about to enter the Ann Arbor Law School when the illness of a brother brought him in his earliest youth to Colorado. Its beauty, its rich possibilities, enchanted him. Here he married a very cultivated and beautiful young woman, whose parents came in her early girlhood to Colorado, and whose sympathetic and perfect companionship has been the unfailing source of his noblest inspiration.

In an address on "Pathfinders and Pioneers," given before an irrigation congress at Colorado Springs, we find Governor Adams saying:

"What a sublime moment when the explorer realizes the fruition of his dream! What fateful hours upon the dial of human progress when Columbus saw a new world emerge from the sea, when Balboa stood 'silent upon a peak in Darien,' when Lewis and Clark upon the continent's crest saw the waters of the rivulet run toward the West! Such

events compensate great souls, and their spirits defy hardship, ingratitude, chains, dungeons, and the axe. The curtain has been run down upon the careers of those brave men whose praise we sing. Their race is run. The explorer, priest, trapper, and pioneer have vanished.

> "'Westward the course of empire takes its way;
> The four first acts already past,
> A fifth shall close the drama with the day;
> Time's noblest offspring is the last.'

"Would it be a daring assumption to consider the irrigated regions of America as the arena in which the fifth act, time's noblest offspring, is to perfect and complete the drama of civilization?

"Irrigated lands were the cradle of the race. The first canals were run from the four rivers of Paradise. May not the fruition of mankind seek the same conditions amid which it was born? Providence has kept fallow this new land until man was fitted to enter and possess it.

> "'Hid in the West through centuries,
> Till men, through countless tyrannies, could understand
> The priceless worth of freedom.'"

"I would not decry culture and refinement," said ex-Governor Adams in this address; "they are the charm and beauty of modern life, the music and art of the social commerce of the age; but in their acquirement I would not give up the robust, vigorous, daring qualities of the pioneer."

The Governor proceeded:

"They had blood and iron in their heart, they had the nerve to dare, the strength to do. I do not believe in battle for battle's sake; but I never want to see our people when they are not willing to fight, and able to fight. The only guarantee of peace and liberty is the ability and willingness to do battle for your rights. Refinement alone is not strength, culture alone is not virtue. Absalom, Alcibiades, and Burr stand in history as the most polished, cultured men of three ages, yet they were more a menace than a brace to the liberties of their time. In stress, the world calls upon the Calvins, the Cromwells, the Jacksons, Browns, and Lincolns. They were stalwart, strenuous, courageous men; not cultured and refined, but rich in royalty and daring. It is the rugged and the strong, and not the gentle and the wise, who gather in their hands the reins of fate and plough deep furrows in the fields of human events. It is they who have driven the car of progress and have woven the deepest colors in the fabric of human happiness. It is true that some of our Western torch-bearers were not perfect; none of them were ever anointed with the oil of consecration; around them surged the temptations of a wild and boisterous age; through their hearts and souls there swept the impulses and passions of the strong; if they sinned, it was against themselves, not their country. Let their frailties be forgotten, and their good cherished. Often rough and defiant of the conventionalities, they were ever true and loyal, and most of these empire builders can stand before the great white throne with

open hearts. They were the architects, the Hiram Abifs of these Western empires. They laid the foundations in courage and liberty."

Let no one fancy that Pueblo is a primitive Western city devoid of electricity, telephones, motor cars, or even Marconigrams. Let no one fancy it is too far from Paris to have the latest French fashions. It is hardly an exaggeration to say that it demands the best and the most up-to-date ideas of the Eastern cities to be at all eligible in these Colorado towns. Pueblo has a most delightful clubhouse on the edge of a lake — the lake is artificially created, and being made to order, is, of course, exactly the kind of lake that is desired, the water being conducted from the mountains into a large natural depression — where great open fires in every room greet the daily visitor; where there are large reading-rooms, a dining-room, and a ballroom ; no intoxicating beverages of any kind are allowed to be sold, so that youths and maidens may at any time enjoy the club with no insidious dangers to their moral welfare.

There are many centres of social life; and if Pueblo people have any other conceivable occupation than to give dinner parties at night and go motoring in the morning, with endless receptions of the Daughters of the Revolution and other clubs, organizations, or purely private card receptions invading the afternoons, the visitor hardly realizes it. The dinners given are often as elabo-

rate as in the large Eastern cities, as one, for instance, given by Mr. and Mrs. Mahlon D. Thatcher at their stately home "Hillcrest," where the decorations were all in rich rose red, a most brilliant effect, and the souvenirs were India ink reproductions of old castles on white satin. The dinner cards held each a quotation from the poets.

Pueblo is always all sunshine and radiance, and has a beauty of location that makes it notable, with its encircling blue mountains and picturesque mesas, and the perpetual benediction of the Spanish Peaks silhouetted against the western sky. Its new library is the pride and delight of every citizen. It is one of the Carnegie chain, — a large, two-story and basement structure of white Colorado stone, the interior finished with the richly variegated Colorado marble which is used for mantels and fireplaces. The book stacks, the spacious and splendid reading-room, the children's room, and the smaller ones for reference and special study, are all planned on the latest and most perfect models.

The library is in the Royal Park, on the crest of one of the mesas, very near the home of Governor Adams. It is a library to delight the heart of the book-lover. Pueblo offers, indeed, great attractions to all who incline to this land of sunshine. The climate is even more mild than that of Denver, from which city it is a little over three hours distant by the fast trains, or four hours by slower

ones. Colorado Springs lies between — two hours from Denver and a little over one hour from Pueblo. The location combines many attractions. With three railroads; its large industries in smelting and steel; its excellent schools, both public and private; its churches, its daily newspapers; its library; and its fine clubhouse, open to families, — women and children as well as men enjoying it freely, — Pueblo seems one of the most delightful of places. It has large wealth and a power of initiating many opportunities. It is on the most picturesque and delightful lines of travel to Cañon City, Salida, Leadville, Glenwood Springs, and through Salt Lake City to the Pacific Coast; or on the line to Arizona and the Grand Cañon of the Colorado, and on to Los Angeles and San Francisco; or eastward to Chicago and the Atlantic Coast; or southward to Mexico, or St. Louis, or New Orleans. Pueblo is really in the heart of things, so to speak. The Chicago papers arrive the next day, the New York papers the third morning, and the telephonic communication is simply almost without limit. Governor Adams will step from his library into another book-lined room where the telephone is placed, and from there talk with people in five different states. Once he held a conversation with a man at the bottom of a mine a few hundred miles away, — a man whose subterranean sojourn had the alleviation of a telephone.

The greatest industrial organization west of the Missis-

sippi River is that of the Colorado Fuel and Iron Company, whose largest plant is at Pueblo, and is held at a valuation of fifty-eight million dollars. On its pay-roll are fifteen thousand employés. There are twenty thousand tons of steel rail produced each month, and it is said that this number will soon be largely increased, and that the Goulds and the Rockefellers are arranging to utilize the product of these mills for their vast railroad interests. The company owns such large tracts of land in Colorado, New Mexico, Utah, and Wyoming; it owns coal mines, iron mines, lime quarries; it owns parts of two railroads, besides telegraph and telephone lines galore, so that by reason of these extensive holdings it is able to secure at a minimum of cost all the raw materials from which the finished products are turned out. Upward of three hundred thousand acres of the richest coal lands in the West, an empire containing one hundred square miles more than the coal area of Pennsylvania, constitute the holdings for coal mine purposes of the company. In addition there are iron, manganese mines, and limestone quarries containing the elements which give to the product of the furnaces and mills qualities that secure the markets of the Western world. Its plant at Pueblo has become the centre of a town called Minnequa, composed of its own employés and their families. The company has established a model hospital, with a surgeon's department fitted up with the most elaborate and finest scientific

and nursing facilities; a fine library and large reading-rooms, and a recreation hall and gymnasium for the workmen. Nearly one million dollars has been expended on the tenant houses belonging to the company, which are rented to their employés on fair and advantageous terms. In many respects Minnequa, at Pueblo, is one of the most remarkable manufacturing centres in the world, presenting aspects that invite study, in its extensive resources, the vast and colossal character of its purposes, and its remarkable achievements. All employés are given the opportunity to acquire homes; and every late ideal in the way of providing opportunities for their care in health, in mental and moral development, and in recreations, is carried out to the fullest possible extent.

The company has recently engaged in an irrigation enterprise in the purchase of water-right priorities of the Arkansas River for seventy cubic feet of water per second, at an expense of one million dollars. These rights, which date back to 1860–62, are among the oldest existing, and they insure to the company the uninterrupted and certain possession of the river flow. A court decree enabled them to change the point of division, and they have constructed a new head-gate at Adobe, six miles east of Florence. A canal fifty-eight miles in length is being constructed from Florence to the mills owned by the company. The cost of this canal will be some three quarters of a million. These mills produce over seventy-

five thousand tons of iron and steel each month. The manufacturing plant at Minnequa includes blast furnaces, converting works, blooming mills, a merchant iron mill, a hoop and cotton tie mill, a spike factory, a bolt factory, a castings and pipe foundry, with open hearth furnaces, a reversing mill, and many other appliances.

"It must not be supposed, because we find it necessary to practise irrigation in Colorado, that we therefore never have any rains," observed a Coloradoan; "on the contrary, the rains of spring are usually of such abundance as to make the ground in fine condition for ploughing and putting in crops, and we seldom find it necessary to apply water to germinate any kind of seed; only once, in thirteen years' experience at Greeley, were we compelled to resort to irrigation before crops of all kinds were well up and considerably advanced in growth. About the last of May, however, as regularly as the natural periods of summer, autumn, winter, and spring occur in the other states, never varying more than a week in time, these copious rains suddenly cease and give place to light and entirely inadequate local thunder-showers. Now is the accepted time, and all over cultivated Colorado, within a period of not more than two days, every flood-gate is opened and the life-giving current started to flowing on the rapidly parching grain. Corn will endure until later in the season, but all sowed crops must get one thorough application of water within two weeks or become severely

injured for the want of it. Day and night the silent current flows on and on, among the fields of grain; not a drop of water nor a moment of time must run to waste until the first irrigation is completed."

In so exceptional a summer of drought and heat as was that of 1901 the advantages of irrigation stand out. Journeying through Kansas, the long day's ride across the state revealed continued devastation from the lack of rain. Corn fields looked almost as if a fire had passed over them, so shrivelled and stunted they were; but in Colorado on every hand there were greenness and luxuriance of vegetation and of crops. The result is simply that, with irrigation, man controls his climate and all the conditions of prosperity. Without it, he is at the mercy of the elements.

The Union Colony of Greeley was the first to introduce upland irrigation in Colorado. Of the method employed, the "Greeley Tribune" gave this description:

"Almost the first question asked by many persons on their first arrival in Colorado, when they see the irrigating ditches running along the sides of the bluffs high above the river, and back from it five, ten, or twenty miles, is, 'How do you get the water out of the river, and so high above it? It looks as if you made the water run uphill.' The answer is very simple. All the rivers of Colorado are mountain streams, and consequently have a fall of from ten to thirty feet to the mile, after they reach the plains. In the mountains, of

course, the fall is often much greater. The plains also have a gradual slope eastward from the foothills, where the altitude is generally between six and seven thousand feet above sea level, while at the eastern boundary of the state it is only about three thousand feet. Take, for example, the canal generally known as Number Two, which waters the lands of the Greeley Colony. This canal is taken out of the Cache la Poudre River, about seventeen miles west of Greeley, and where the bed of the river is probably a hundred and sixty feet higher than it is at Greeley. The bed of the canal only has a fall of from three to three and a half feet to the mile; therefore it is easily seen that when that grade is continued for a number of miles, the line of the canal will run in a direction further and further from the river, and on much higher ground, so that the lands lying between the canal and the river are all 'covered by,' or on a lower level than, the water in the canal. In the process of irrigation this same plan must be followed, of bringing the water in on the higher side of the land to be irrigated, then the water will easily flow all over the ground."

In Weld County, of which Greeley is the county seat, irrigation was extended during 1905 to cover from fifteen thousand to twenty thousand acres of arid land never before under cultivation, and storage reservoirs increased in capacity. It is proposed to cut a tunnel through the Medicine Bow mountain range and to bring a large quantity of water through from the Western slope to irrigate an additional fifty thousand acres of prairie.

Within the past year there have been two potato starch factories started in successful operation in Greeley which are estimated to pay out annually one hundred thousand dollars for potatoes that have heretofore been practically a total loss to the farmers.

The Swift Packing Company of Chicago propose investing one and a half millions in further irrigation in this county. The products of the Greeley district alone, for 1905, were five and a half millions, — a fact that suggests the wise foresight of Hon. Nathan Cook Meeker, the founder of the town, in selecting this location, in 1869, for his colony.

Of recent years a remarkable feature of agricultural progress in Colorado has been developed by the "dry farming" system, the discovery of which is due to Prof. H. W. Campbell, who has been experimenting, for some twenty years past, in Eastern Colorado, in the scientific culture of the soil without benefit of irrigation. Professor Campbell says that he had been assured that corn would not grow at an altitude of three thousand feet, as the nights would be too cool; but that he can refute this, as, during the past five years, he has averaged from thirty to forty-two bushels per acre at an altitude ranging from five thousand to nearly seven thousand feet. Successful agriculture is, in Professor Campbell's belief, based on the fundamental principle of soil culture, and in an interview he said:

"While the great work now being done by the government in promoting irrigation enterprises in the more arid portion of the West and the using of millions upon millions of money for the building of mammoth reservoirs have value and virtue, and means the development of many sections that must remain almost worthless without them, and the spending of thousands of dollars in traversing foreign countries to secure what some have pleased to call drought-resisting plants, will undoubtedly play their part in promoting the welfare and prosperity of Colorado, . . . yet there should also be an understanding of, first, the necessary physical condition of the soil for the most liberal growth and development of roots; secondly, the storing and conserving the entire season rainfall, — not only the portion that falls during the growing season, but from the early spring to late in the fall; thirdly, the fact that air is just as important in the soil as water, and that it is the combination of the elements of air and water in the soil, together with heat and light, that is most essential; and that when these conditions are fulfilled, Eastern Colorado will come to its rightful own, and little towns and cities will spring up along all the great trunk lines, while the intervening country will be dotted with ideal farm homes and shade trees; orchards and groves will break the monotony of the now bleak prairie, and present a restful, cheerful, homelike, and prosperous condition."

While agriculture in Colorado is regarded as in its infancy, yet the product of Colorado farms alone contributed almost fifty-one millions to the world's wealth, in 1905,

exclusive of wool, hides, or live stock. Professor Olin of the State Agricultural College estimates that there are over two hundred thousand acres in Colorado which produce crops without irrigation, by the application of Professor Campbell's "dry-farming" system. The so-called dry land, consisting of millions of acres in Eastern Colorado, averages now four dollars per acre, where one year ago untold quantities could be bought for an average of two dollars per acre. The speculative value of this land has gone up wonderfully under the impetus of the Campbell system of dry farming. If this system comes anywhere near proving the claims of its advocates, it will vastly increase the wealth and population of the state. With a greater understanding of the science of dry culture it is certain that the farmers of the state and the state generally will experience immeasurable advantage. In the eastern plains of Colorado are embraced more than fifteen million acres of land which are now lying practically useless, only a small amount being utilized for ranging cattle. The claims of dry-culture enthusiasts and those who have been experimenting with seed imported to meet the dry conditions are, that this empire will be made to yield harvests which will support many thriving communities. In proof of their claims they point to so-called model farms established at various places on the plains where the hitherto unyielding soil has borne substantial crops.

One important feature in the agricultural development of Colorado is the extinction of the bonanza ranch of thousands of acres. Instead, farms are reduced to manageable proportions, and are carried on far more largely by intelligent thought and scientific appliances than by mere manual labor.

The present day Colorado ranch is an all-the-year-round enterprise. The ranch owner is a careful business man, who watches his acres and the products thereof even as the successful merchant or manufacturer acquires close knowledge of all the details of his business. He sows his land with diversified crops, rotating hay, grain, and root crops scientifically for the double purpose of securing the greatest yields and preserving the nourishing qualities of the soil. Keeping in touch with the market conditions of the world, and with the advancing developments of science, he is easily the master of the situation, and in no part of the country is the condition of the farmer better, or perhaps so good, as in Colorado. The agriculturist of the Centennial State who is the owner of two quarter sections, or even of one, is altogether independent. The returns from his business are absolutely sure, and with the certain knowledge of substantial gains at the end of the season he plans improvements to his home, and comforts and even luxuries for himself and family, which far exceed those usually secured in the Middle West or by the small farmers of the East. In Colorado it will be found that almost every young man

and woman of those who are natives of the state are college graduates. Co-education prevails, just as does the political enfranchisement of women, and the results of this larger extension of the opportunities and privileges of life are very much in evidence in the beauty, the high intelligence, and the liberal culture that especially characterize the women of Colorado.

Irrigation enterprises in Colorado are far more widely recognized than is the Campbell system of dry culture; but in 1905 these enterprises appealed with increased force to capitalists outside, as well as within Colorado, as a safe and profitable means of investment. Land held at ten dollars per acre is, by irrigation, instantly increased in value from twenty to fifty dollars; and it was seen that the most favorable localities within the state in which to raise funds for further extension of irrigation were among the farmers in the older irrigated sections who have won their ranches, improved their places, and made large deposits in the banks through the use of the productive waters trained to make the soil blossom with wealth.

Irrigation is developed to its highest excellence in Northern Colorado and in the valley of the Arkansas River. These regions have been the longest under irrigated culture, and their value is increasing rapidly. Each year sees the agriculturist grow more conservative in his use of water, and the quantity thus saved has been applied to new lands. Thus, in an interesting and quite un-

dreamed-of way, a problem that incited discord and dissension, that promised only to increase inevitably as larger territories of land and their correspondingly increased irrigation should be held, was brought to a peaceful solution. Continued litigation, and a great pressure to secure legislative restrictions of the use of water supply, and the constant irritation and turmoil involved in these disputes, were all, happily, laid to rest by the discovery of the farmers themselves that extravagance in the use of water was not conducive to their own prosperity. In the matter of flood waters the irrigation experts of the state are quite generally meeting the condition in their own way. Storage reservoirs are dotting the irrigation systems at frequent intervals, and in the dry months the supply piled up behind the cement dams is drawn off to furnish the final necessary moisture for the maturing of the crops.

Another possibility of irrigation that is receiving the attention of engineers is the utilization of the streams for power purposes. In many cases the power thus generated will be made to accomplish marvellous feats in the way of construction, as in the instance at Grand River, already described.

One of the special journeys in Colorado is that called a "trip around the circle," affording more than a thousand miles among the mountains within four days' time; but a permission for ten days is available, thus affording several detours by stage, which penetrate into the most sublime

regions. The abysmal depth of five of the great cañons; many of the noted mountain passes; great mining camps, with their complicated machinery; cliff-dwellings, vast plateaus, and stupendous peaks; Indian reservations; the icy crevasses a thousand feet in depth; the picturesque "Continental Divide," from which one looks down on a thousand mountain peaks, where the vast Cordilleras in their rugged grandeur are seen as a wide plain; the beautiful Sangre de Cristo ("Blood of Christ") range; the sharp outlines of the Spanish Peaks, rising twelve and thirteen thousand feet into the air; beautiful meadow lands where the blue and white columbine, the state flower of Colorado, blooms in profusion, and the tiger lily, the primrose, and the "shooting stars" blossom, — all these are enjoyed within the "circle" trip; and it also includes Leadville, the "city above the clouds," Durango, Ouray, Gunnison, and other interesting towns. It offers a near view of the Mount of the Holy Cross, which strange spectacle is made by the snow deposits in transverse, gigantic cañons, — the perpendicular one being fifteen hundred feet, while the transverse cross is seven hundred and fifty feet in length; of Lost Cañon, a novelty even in a land of cañons; and of the Rio de Las Animas Perditas, old Fort Lewis, the valley of Dolores River, a region of early Spanish discovery; of Black Cañon and Cimarron Cañon and Grand River Cañon, whose walls rise to the height of more than twenty-five hundred feet; —all these

are but the merest outline and hint of the scenic wonders compassed within the circle trip. Up the cañons the train climbs; through narrow gorges with overhanging rocks, on and on, till a plateau is reached; then more cañons, more climbing, more peaks towering into the skies, and waterfalls chiming their music. As even an enthusiast in scenery cannot entirely subsist on stars, sunsets, and silences, the luxurious comforts of these trains enhance one's enjoyment. A dining-car is always on, and the excellence of the food and the moderate prices for all this perfect comfort and convenience are features the traveller appreciates. That dance of the Brocken which one fancies he sees in the fantastic sandstone formations on the mountain's side on the romantic route to Glenwood Springs is occasionally duplicated in other cañons, where these strange rocks resolve themselves, with the aid of the mysterious lights and shadows, into a dance of witches, and every shape springs to life. The train rushes on, and one leaves them dancing, confident that although these figures may be stationary by day, they dance at night. Another mountain slope of the sandstone shows a colossal figure of a prophet, — shrouded, hooded, suggesting that solemn, majestic figure of death in Daniel French's great work entitled "Death and the Sculptor." The precipitous walls of the cañon rise in many places to over a thousand feet in height. In their sides such a variety of designs and figures have been sculptured by erosion that the traveller half im-

CATHEDRAL ROCKS, CLYDE PARK, CRIPPLE CREEK SHORT LINE

agines himself in the realm of the gods of Hellas. These innumerable designs and figures incite not only the play of fancy, but they invite the study of the geologist, who finds here the primary rock formations exhibited in the most varied and striking manner. As the train winds deeper into the heart of the projecting rocks the crested crags loom up beyond the sight; below, the river rushes in foaming torrents and only a faint arch of the sky is seen. There are recesses never penetrated by the sun.

Another group of the sandstone shapes, under the transformation of moonlight, resolved itself into a band of angels, and still another mountain-side seems to be the scene of ballet dancers. The splendid heights of Dolores Peak and Expectation Mountain, the Lizard Head, the Cathedral Spires, the Castle Peaks of the Sangre de Cristo — what points and groups that fairly focus all conceivable sublimity they form! Here is a state more than a third larger than all New England; it is the state of sunsets and of stars; of scenery that is impressive and uplifting, rather than merely picturesque; a state whose plains, even, are of the same altitude as the summit of Mount Washington in the White Mountains, and whose mountains and peaks ascend to an altitude of over two miles above this height. Of the total extent of Colorado, the mountains, inclusive of parks and foothills, occupy two-thirds of the area. So it is easily realized to what

extent they dominate the scene. But great and impressive as they are in effect, the mountain features have an undoubted influence, however unconsciously received, on the character of the people. The effect of beauty on character is incalculable. When to beauty is added sublimity, how much greater must this effect be! It was not mere rhetoric when the Psalmist exclaimed, "I will lift up mine eyes unto the hills, from whence cometh my help. My help cometh from the Lord, which made heaven and earth. . . . The Lord shall preserve thee from all evil. He shall preserve thy soul." It is this train of thought which is inevitably suggested to the mind in gazing upon the stately, solemn impressiveness of the mountain scenery. Nature has predestined Colorado for the theatre of noble life, and the influence is all-pervading.

Great engineering feats are in evidence all over Colorado. Miles of railway tunnels pass through the mountains. No mountain, not even Pike's Peak, is regarded in Colorado as being in any sense an obstacle to any form of the extension of travel. The railroad either passes through it or climbs it. The matter is apparently simple to the railroad mind, and evidently all the peaks of the Himalayas piled on Pike's or Long's peaks — "Ossa piled on Pelion" — would not daunt the Coloradoan enterprise. In fact, the greater the obstacle, the greater is the enterprise thereby incited to overcome it. In the most literal way obstacles in this land of enchantment are miraculously

transformed to stepping-stones. But what would you, — in an Enchanted Country?

Colorado has four great systems of parks whose elevation is from seven to nine thousand feet: North Park, with an area of some twenty-five hundred square miles; South Park, one thousand; Middle Park, three thousand; and San Luis, with nine thousand four hundred square miles, — all sheltered by mountains, watered by perpetual streams, and so rich in grass lands as to afford perpetual grazing and farming resources. Colorado has nearly one thousand inland lakes, and over two hundred and fifty rivers fed from mountain snows. Its grand features include mountains, cañons, gorges and deep chasms, crags and heights; its mountain systems cover more than five times the area of the Alps, and its luminous, electrically exhilarating air, its play of color, and the necromancy of distances that seem near when afar — all linger in the memory as a dream of ecstatic experiences. Colorado is all a splendor of color, of vista, and of dream. It is the most poetic of states.

Now the fact that this country has been importing over two million tons of sugar a year lends importance to the beet sugar factories already largely established. Colorado has a future in beet sugar hardly second to her gold-mining interests, if her interests receive the national safeguarding that is her due.

Colorado and the Philippines were brought into collision

of interests by the attempt to reduce the tariff on sugar imported from those islands. This would ruin the beet sugar industry in the Centennial State, which is already beginning to transform it into one of the richest agricultural states in the Union.

This industry is absolutely identified with the irrigation interests of Colorado, as it is the arid land irrigated that offers the best facilities for the sugar beets.

The beet sugar enterprise means remunerative work for the farmer, good business for the railroads and merchants, and an incalculable degree of prosperity for all Colorado. Thomas F. Walsh, of Ouray, Colorado, and of Washington, made an earnest protest against this movement.

Mr. Walsh is a great capitalist, but while he has not one dollar concerned in the beet sugar enterprise of his state, he is a loyal and devoted son of Colorado. In a convincing manner he said:

"... It is not a small thing, this robbery of American farmers and home-makers for the benefit of sugar corporations and exploiters of Philippine labor. It means the ultimate ruin of an industry that is full of the brightest promise for thousands of Americans. It means that the people of the United States shall pay tribute to a trust forever for one of the necessaries of life. ... The removal of protection to Colorado sugar growers would simply mean that the sugar trust, or cormorants in human form like it, would go to the Philippines, employ the peons at starvation wages, and send millions of

tons of sugar to the United States. Would the consumer here be benefited? Not at all. Has the consumer benefited by reciprocity with Cuba? The sugar trust has received a gift from the treasury of the United States — that is all."

And again Mr. Walsh truly says:

"This proposition is merely a design on the part of enormously rich, greedy speculators, who are willing to adopt any means for the accumulation of more money. Money, money, money! They have already a thousand times more than they need, and are simply money mad. They propose to exploit the Philippines for their own selfish ends. Help for the poor Filipinos, indeed! Imagine the generosity of these get-rich-quick sharks towards the peons in their employ. Think of the wages that would be paid, contrasted with the standard of living in the United States! I 'd rather have the people of this country exterminated than to be brought to such a level."

Regarding the arid land Mr. Walsh said:

"With the application of water to this land under the National Irrigation Act — one of the greatest acts of statesmanship accomplished under our broad-minded and far-sighted President — the people of Colorado will furnish an outlet for a great population, and the cultivation of beets for sugar will enable thousands of American citizens to establish homes of their own. That is what is now being done in Colorado, and the industry is in its infancy. The people have gone in there at the suggestion of the government, planted beets provided

to them by the agricultural department, and started a great industry. There was an implied, if not expressed, promise that they were to be protected in this new industry. Yet it is now proposed to place them in competition with the peons of the Philippines, at the most critical time in the history of the industry. The people of the East," continued Mr. Walsh, "do not seem to be able to grasp the great possibilities of the arid West under the operation of the national irrigation law. The West, properly irrigated with water that we know can be developed by drainage, wells, and underground flow, will easily support fifty millions of people. Think of what this means! Fifty millions of American citizens owning their own homes! It is an incalculable addition to the wealth and strength of the United States."

One of the very valuable and exceptional resources of Colorado is in its stone, which equals the world's best product in its quality. Millions of tons of almost every variety of building stone lie unclaimed on the hills and plateaus. There are quarries in Gunnison County that would make their owners multi-millionnaires, could the stone be made easy of access or transportation. The difficulty of the former, and the high freight charges, combine to delay this field of development. In Pueblo there is a marbleized sandstone that is very beautiful. Its "crushing" strength, as the architectural phrase goes, is between eleven and twelve thousand pounds to the square inch, — a strength which exceeds the most exacting requirements of any

architect. This stone is found in unlimited quantities. In the country around Fort Collins there is a red sandstone which is very popular, and this is also found in large quantities at Castle Rock, south of Denver. Near Trinidad is a gray sandstone of great beauty, and the Amago stone, which is used for the Denver Postoffice, is a favorite.

In stone for decorative purposes also, Colorado is plentifully supplied. Specimens of marble from the vicinity of Redstone show characteristics as beautiful as are seen in the finest Italian marble found at Carrara.

Besides the marble for building there are also vast beds of the purest white marble, which will soon be placed on the market for statuary purposes.

Vast deposits of granite are to be found in many different sections of the state. In Clear Creek County, about Silver Plume and Georgetown, there are mountains of granite. In the southern part of the state deposits are found which are used extensively for monumental purposes, and great quantities of this granite are shipped out of the state.

Although only a limited amount of work in the way of development and seeking markets has been done for Colorado stone, the value of the sales is already an appreciable source of revenue.

Statistically, Colorado ranks first in the United States as to the yield of gold and silver; first in the area of land under irrigation; first as to the quality of wheat,

potatoes, and melons, and as to the percentage of sugar in the sugar beet. The state ranks fifth in coal and iron; sixth in live stock, and eighth in agriculture. It is true, however, that irrigated agriculture is considered to be the most important interest in Colorado. The Centennial State is not, primarily, as has often been supposed, a mining state; the mines, rich and varied in products as they are, offer yet a value secondary to that of agriculture. A mine is always an uncertainty. A rich pocket may be found that is an isolated one and leads to nothing of a permanently rich deposit. A vast outlay of time and expensive mechanism can be made that will not result in any returns. An apparently rich mine may suddenly come to an end; the miner may have reason to believe that if he could go down some thousands of feet he would again strike the rich vein; he may do this at great cost of machinery and labor only to find that the vein has totally disappeared, or does not exist. All these and many other mischances render mining something very far from an exact science, — something, indeed, totally incalculable, even to the specialists and experts, — while agriculture is an industry whose conditions render it within reasonable probabilities of control and calculation. The great problem which continues to confront Colorado, and to a far greater extent Arizona, is the more complete understanding of what Prof. Elwood Mead, the government expert in national irrigation problems, calls "the

duty of water" and the conditions which influence it as a basis for planning the larger and costlier works which must be built in the future.

"One of the leading objects of expert irrigation investigation is to determine the duty of water," says Professor Mead, and he adds:

"In order to do this it is necessary to deal with a large range of climatic conditions, and to study the influence of different methods of application and the requirements of different crops. Farmers need an approximate knowledge of the duty of water in order to make intelligent contracts for their supply. It is needed by the engineer and investors in order to plan canals and reservoirs properly. Without this knowledge every important transaction in the construction of irrigation works, or in the distribution of water therefrom, is very largely dependent on individual judgment or conjecture. . . . In constructing reservoirs it is as necessary to know whether they will be filled in a few years by silt as to know that the dam rests on a solid foundation; and it is as desirable to provide some means for the removal of this sedimentary accumulation as it is to provide an adequate waste way for floods."

The problems of irrigation are evidently highly complicated ones. There are large tracts of irrigated land selling at three hundred dollars an acre which, fifty years ago, were held as worthless desert regions. The value of water rights has risen from four to thirty-five dollars an

acre. The Platte River and its tributaries, alone, irrigate one million nine hundred and twenty-four thousand four hundred and sixty-five acres. In the South Platte the average flow of water is two thousand seven hundred and sixty-five feet a second. The North Platte and its tributaries irrigate about nine hundred thousand acres. There are now over two million acres in Colorado under actual irrigation, with an agricultural population of some one hundred and fifty thousand, with a total income of over thirty millions. The agricultural population is increasing so rapidly that the day cannot be distant when it will reach a million, with a total production of more than one hundred and fifty million dollars. It is believed that an expenditure of forty millions in irrigation at the present time would immediately result in an increment of from two hundred to three hundred millions. The irrigation bill that passed Congress in 1904 proved of the most beneficial nature to Colorado ; not only for its immediate effects, but for the promise it implied and the confidence inspired in the immediate future. The encouragement of irrigation in Colorado is the influence that enlarges and develops the agricultural efforts, promoting the growing industry of beet sugar and extending all resources. Beyond the material results there lie, too, the most important social conditions of the greater content and industry of the people and the corresponding decrease of tendencies toward anarchy and disorder.

In the quarter of a century — with the sixth year now added — since Colorado became a state there has passed over twenty million acres of government lands into the individual ownership of men whose capital, for the most part, consisted solely of the horses and wagon that they brought with them. Of this vast area there are some two and a half million acres under agricultural cultivation, which are assessed at a valuation of some twenty-five millions. The Boston and Colorado smelter, established in 1873, has produced a valuation in gold, silver, and copper of nearly ninety-six millions. In the year of 1905 the Colorado mines, — gold, silver, lead, copper, and zinc, — all told, produced nearly ninety million dollars.

The population of Colorado is increasing rapidly, not only by the stream of immigration that pours in of those who come *con intentione*, but to a considerable degree by those who come only as tourists and visitors, and who become so fascinated with Colorado's charm, and so impressed with her rich and varied resources, that they remain. The development of this state is one of the most remarkable and thrilling pages in American history. It is the story of personal sacrifice, personal heroism, personal devotion to the nobler purposes and ideals of life that no one can read unmoved.

"There can be no backward movement, not even a check in the steady tramp of such a conquering army," said the "Denver Republican" editorially. "Before it,

mountains melt into bars of gold, of silver, of copper, lead, zinc, and iron. It passes over virgin soil, and behind it spring up fields of grain and groves of fruit. It brings coal from distant fields, rocks from far-away hills, and its artisans mould and weld and send out tools of trade and articles of merchandise to all the world.

"It pushes the railroads it needs to where it needs them, and the world comes to marvel at its audacity. It finds to-day what yesterday it needed and to-morrow it must have. It waits only the world's needs or pleasures to find yet other ways to supply them."

The prosperity of Colorado is a remarkable fact in our national history. By some untraced law, defects, faults, misfortunes, or crimes are always made more prominent than virtue and good fortune. The crime is telegraphed everywhere, the good deed is passed over in silence — as a rule. And so the strikes, and the outlawry, and the discords and troubles of Colorado have been very widely heralded, while there has been less general recognition of the firm and just governmental authority that has held these outbreaks in check, and has almost succeeded in ending them entirely.

In general aspects and conveniences the towns and cities are under excellent municipal regulations. Leadville, formerly one of the most lawless of great mining camps, is to-day a peaceful and prosperous city on a great trans-continental highway. The Western towns begin with wide, clean,

beautiful streets. They begin with the most tasteful architecture. It may not be the most expensive or the most colossal, but it is beautiful.

Northern Colorado is in many respects a distinctive region of itself. It offers rich agricultural facilities; the beet sugar factories at Greeley are making it a commercial centre; the electric trolley line which will soon connect Greeley with Denver will multiply the homes and settlements within this distance of fifty miles, and this part of Colorado is enriched with great coal fields. The latter promise not merely their own extension of industries in digging the coal and putting it on the market, but they also indicate another and far more important result, which stimulates the scientific imagination, — that of making Northern Colorado a power centre whose strength can be applied in a variety of ways and transmitted over a large area of country. For more than two years the Government has been conducting a series of experiments in a very thorough manner, endeavoring to ascertain the gas values of the great lignite coal fields between Boulder and Denver. It has been discovered that the converting of the coal into gas gives it double the efficiency for use as a motor power for engine or for fuel than can be gained from the coal in its natural state. A ton of coal converted into gas will, as gas, give twice the power that the coal would have yielded, and give the same power that two tons of coal, that has not been converted into gas, would afford. In order, how-

ever, to produce this power economically, it must be done at the point of mining. It is there that the gas producers must be located; and from these points the gas can be transported in pipes, or can be converted into electricity and sent by wires at far less cost than would be that of sending the coal itself by freight. These discoveries not only suggest that this region in Colorado is destined in the near future to become a power centre which will be tapped from the surrounding country for a great distance in all directions, and will thus render Boulder one of the most important of Western cities; but they also suggest the evident tendency of the age toward intensity rather than immensity, — toward the concentration of energy in the most ethereal form rather than its diffusion through large and clumsy masses of material.

Colorado contains over twenty-five thousand square miles of coal fields, distributed over the state, with an average annual product of over seven million tons. No other corresponding area in the entire world exceeds Colorado in its great storage of coal, and the state ranks as one of the first in the production of iron.

There are already fifteen beet sugar factories in operation, representing investments amounting to over twelve million dollars, and which are estimated to have produced, in 1906, an aggregate of some two hundred and twenty thousand pounds of sugar, the percentage of saccharine matter being higher than that of the sugar beet of California.

SULTAN MOUNTAIN

Statistically, Colorado ranks first in irrigation, and there are some eighteen thousand miles of irrigating canals already in operation, with the system being so rapidly extended that it almost outruns the pace of calculation. Three million acres are under cultivation in Colorado, and two million eight hundred and fifty thousand acres are irrigated; the storage reservoirs already constructed are sufficient to place another million of acres under cultivation. This irrigated land sells from sixty to one hundred dollars per acre. Colorado has a reputation for being a great potato state, and in the year 1905 the town of Greeley alone shipped over three hundred thousand dollars' worth of potatoes, while tomatoes are a feature often yielding ninety dollars to the acre, and celery has been estimated to yield one hundred and fifty dollars an acre. There are tracts of from two to three thousand acres devoted to peas alone, producing forty to fifty thousand cans; and asparagus grows with great success.

Colorado is a fruit country offering the best of conditions. The peaches of Southern Colorado lead the world in flavor, beauty, and size; the canteloupe flourishes with such extraordinary vitality that it often yields a revenue of fifty dollars an acre; and the watermelon also grows in unusual perfection. The valley of the Arkansas River is the great region for producing melons, and Colorado exports these to New York, Philadelphia, Chicago, and St. Louis. Apples, plums, and pears grow with equally boun-

teous success, and there are fruit farms that with their orchards and small fruits sometimes realize fifty thousand dollars a year, when the season is a good one and the market conditions favorable. The seasons of irrigated land are largely under control, and surpass those regions which are at the mercy of excessive rains or of droughts. So the law of compensation still obtains. The resources of horticulture, alone, in Colorado are very important, and they form one of the most alluring features of this beautiful and richly bountiful state.

In the way of crops, alfalfa takes the lead in Colorado, as wheat does in Kansas. It requires the very minimum of care; the land being once planted with alfalfa, there is need only of turning on the irrigation, and mowing it, at the right time. Alfalfa produces three crops a year, and yields from one to two tons per acre. It sells at from three to ten dollars a ton, and this makes a revenue quite worth considering. The difficulties encountered everywhere in Colorado, in every branch of industry, or in domestic work, are those of securing labor. Wages are high in every conceivable line of work, but to a large extent the labor and service, even when procured, is of a very poor order. In many of the larger hotels employés are often kept on the pay-roll for two months at a time when not needed, simply because it is impossible to fill their places when the need comes. From requirements of the seamstress, the laundress, the cook, the maid, the farmer's

working-men, or the employés in almost any line of work, the same difficulty exists. Much is heard regarding strikes and other forms of the eternal conflict between labor and capital; and yet the high rates paid, the concessions constantly made to the demands of employés, the conditions provided for them, would seem, at a superficial glance, to be such as to bridge over every difficulty. Domestic service is something that presents the greatest problem on the part of the employer. If there is so large a number of "the unemployed" in the East, why should not the conditions balance themselves and this superfluous element find good conditions for living in Colorado? This question involves the problem of economics, with which these pages have nothing to do; but no traveller, no sojourner, can linger in Colorado who is not simply lost in wonder that the varied work that is waiting, with the most liberal payments for the worker, and the multitude of workers in the East who need the liberal payment, cannot, by some law of elective affinity, be brought together.

When it is realized that the Rocky Mountains occupy in Colorado more than five times the entire space of the Alps in Europe, their importance in climatic influence as well as in scenic magnificence can be understood. The forests of Colorado are found on the mountains and foothills. The heights are covered with a dense growth of pine woods, while in lower ranges abound the silver spruce

and the cedar. Colorado has a state forestry association which aims to secure as a reservation all forests above the altitude of eight thousand five hundred feet, as this preservation is considered most important to the water supply. In the Alps there are nine peaks over fourteen thousand feet in height; in the Rocky Mountains, within the limits of Colorado alone, there are forty-three peaks, each one of which exceeds in height the Jungfrau. There are in Colorado more than thirty towns, each of which is the theatre of active progress, and each of which lies at an altitude exceeding that of the pass of St. Bernard. The sublime cañons and gorges are eloquent of the story of Titanic forces which rent the mountains apart. The vast plateaus were once the bed of inland seas. In the cañon of Grand River towering walls rise to the height of half a mile, in sheer precipitous rock, for a distance of some sixteen miles. The strata of these rocks are distinctly defined, and the play of color is rich and fantastic. The vast walls are in brilliant hues of red and amber and green and brown, — the blending of color lending its enchantment to the marvellous scene. Each cañon has its own individuality. No one repeats the wild charm of another. Excursions abound. There is "the loop," an enchanting mountain ride made from Denver within one day for the round trip; the "Rainbow" tour, and others, besides that of the "circle" already described. In each and all these journeys the route is often on the very

verge of the abyss, and the sublimities, the splendor of coloring, exceed any power of language to suggest.

In Northwestern Colorado, along the White River and northward, lies the sportsman's paradise, now reached only by a stage drive of from forty-five to ninety miles from the little town of Rifle on the "scenic route" of the Denver and Rio Grande, beyond Glenwood Springs. Trapper's Lake and the Marvine lakes are well known, and the Marvine Hunting Lodge is a favorite resort of English tourists.

Estes Park, some seventy miles from Denver, a favorite summer resort, is a long, narrow plateau of two or three miles in width and fifteen in length, a mile and a half above sea level, and enclosed in mountain walls that tower above the park from two to seven thousand feet. A swift stream, well stocked with trout, runs through the park. The four great systems of parks divide Colorado into naturally distinct localities: North Park, with an area of twenty-five hundred square miles; Middle Park, with its three thousand; the smaller South Park of one thousand; and San Luis, with over ninety-four hundred square miles, — all, in the aggregate, presenting a unique structural plan. Every journey in Colorado has its vista of surprise. No artist can paint its panoramas. Every traveller in this Land of Enchantment must realize that its exhilaration cannot be decanted in any form. It is a thing that lies in character, moulding life.

Colorado is the Land of Achievement. It offers resources totally unsurpassed in the entire world for an unlimited expanse. These resources await only the recognition of him who can discern the psychological moment for their development. That nothing is impossible to him who wills is one of the eternal verities, and even the expert census taker, or the supernatural tax collector whom nothing escapes, might search in vain, within the limits of the splendid Centennial State, for any man who fails to will. The resplendence of this state of stars and sunshine is due to this blaze of human energy. The Coloradoans are the typical spirits who are among those elect

> " . . . who shall arrive
> Prevailing still;
> Spirits with whom the stars connive
> To work their will."

CHAPTER V

THE COLORADO PIONEERS

"Around the man who seeks a noble end
Not angels, but divinities attend."

"In the deep heart of man a poet dwells
Who all the day of life his summer story tells;
Scatters on every eye dust of his spells,
Scent, form, and color: to the flowers and shells
Wins the believing child with wondrous tales;
Touches a cheek with colors of romance,
And crowds a history into a glance;
Gives beauty to the lake and fountain,
Spies over-sea the fires of the mountain;
When thrushes ope their throat, 't is he that sings,
And he that paints the oriole's fiery wings.
The little Shakespeare in the maiden's heart
Makes Romeo of a plough-boy on his cart;
Opens the eye to Virtue's starlike meed
And gives persuasion to a gentle deed."

EMERSON

NOT even the starry splendor of Colorado skies or the untold magic of the atmosphere vibrating with unwritten music, pictorial with such scenes as no artist ever put on canvas; not even the scientific achievements in feats of civil and electrical engineering; not even any advancement of the arts and the development of industries, commerce, or economics that bring the general life into

increasing harmony with the physical environment, — none of these things, important and significant as they are, touch the profoundest interest of Colorado. For this supreme interest is that of the noble men and women whose lives have left to the state the legacy of their hopes, their efforts, their earnestness, and their faith. "Much is made of the Pilgrim Fathers who landed on Plymouth Rock," editorially remarked the "Denver Republican" in an article on "Pioneers' Day," in June of 1906; "and if there had been phonographs in those days to preserve the record of the speech of one of those old fugitives from European persecution, with what delight the men and women of this generation would listen to the tones which come from the instrument! But, after all, were the Pilgrim Fathers, canonized by nearly three hundred years of tradition, any braver, any more venturesome, any more worthy of honor, than the pioneers who fought Indians and struggled against adverse fortune of every kind while they laid in fear and hope the foundations of this great state?"

Among the poems of Walt Whitman is one entitled "The Beginners," which interprets a high quality of life. The lines are as follows:

"How they are provided for upon the earth (appearing at intervals):
How dear and dreadful they are to the earth:
How they inure to themselves as much as to any — what a paradox
appears this age:

How people respond to them, yet know them not:
How there is something relentless in their fate, all times:
How all things mischoose the object of their adulation and reward,
And how the same inexorable price must still be paid for the same great purchase."

The price was paid by the pioneers of Colorado. They poured out lavishly all their hope, their indomitable energy, their patience, which was faith, as well. They planted, knowing that not to themselves would come the harvest. They builded that those yet to come might have shelter. They gave to Colorado such an endowment of potent but invisible force that its momentum pervades the air to-day. The accelerated ratio of power with which spiritual forces proceed defies even the ablest of the statisticians.

In all the chapters of American history there are none more thrilling than the story of the early life in Colorado; there are no chapters that more vividly demonstrate the absolutely present and practical aid of the divine guidance of God acting through His messengers, — those who have lived on earth and have gone on into the life more abundant.

The lives of the remarkable men and women who have been canonized by the church have left the world the better for their being and humanity the richer for the inheritance of their experience. Their history is not to be held merely as tradition or as superstition. Let one visit in Italy Assisi, the home of St. Francis; Siena, the home of St.

Catherine, and follow the footsteps of others whose names enrich the church calendar, to their homes and haunts, and their record becomes vivid and vitalized as, to a stranger visiting Boston, might become the footsteps of her noble and consecrated lives which are yet almost within universal personal remembrance: the lives of Lydia Maria Child, William Lloyd Garrison, Emerson, Whittier, Lucy Stone, Lowell, Mary A. Livermore, James Freeman Clarke, and Phillips Brooks, — men and women whom Boston may well hold as her prophets and her saints. They, too, were of the order of "The Beginners." They sowed the seeds of the higher life. They were receptive to all high counsels from the ethereal world, from the divine realms; they listened to great truths which the multitude did not hear, and they gave it anew by voice and by pen, till all the world might hear and read and receive it. They were, indeed, —

"God's prophets of the Beautiful."

Such persons were living a twofold life during their entire earthly pilgrimage, and we may well recall their lives and link them with those of the great and the holy men and women of all ages and all climes.

The pathfinders of human progress do not live for personal ease, —

"The hero is not fed on sweets."

These are royal natures, who come into the world not to enjoy ease and prosperity, but who bring with them the

high destiny of sacrifice. Their lives are companioned with struggle and conflict. Of such experiences as theirs well might be asked the question so impressively conveyed in these noble lines by America's great woman poet, — our poet who sang the song of the nation's "Battle-Hymn," — Julia Ward Howe:

"What hast thou for thy scattered seed,
O Sower of the plain?
Where are the many gathered sheaves
Thy hope should bring again?"
"The only record of my work
Lies in the buried grain."

"O Conqueror of a thousand fields!
In dinted armor dight,
What growths of purple amaranth
Shall crown thy brow of might?"
"Only the blossom of my life
Flung widely in the fight."

"What is the harvest of thy saints,
O God! who dost abide?
Where grow the garlands of thy chiefs
In blood and sorrow dyed?
What have thy servants for their pains?"
"This only — to have tried."

These Shining Ones are on earth to serve as co-workers with the divine power; to serve through good fortune or ill fortune; through evil report or good report, — still to serve; still to follow The Gleam. These are the men who

". . . make the world within their reach
Somewhat the better for their being
And gladder for their human speech."

The names of many of these heroic pioneers of Colorado may be unwritten save in the pages of the Recording Angel; but they live and are immortal in the influence they have left as a heritage to succeeding generations, in the trains of thought and purposes they initiated, and in all that potent power of generous aims and noble ideals, — for all advancing civilization rests on lofty ideals. "While the basis of civilization must be material," says the Rev. Dr. Charles Gordon Ames of Boston, "its life must be spiritual. Its end and object must be the soul, and not the body; and it will provide all best things for the body, that the soul may be worthily housed and served. The higher and chief interests of society will always be intellectual, affectional, aspirational — human and humane. The true, the beautiful, and the good — almost unknown to the barbarian, and often mocked at by the Philistines of modern society — will be sought for as men seek for gold and pearls of great price. Wealth will bring its offering to the altars of education and art and worship. Science, as it searches the worlds of matter and of mind, will find new and sacred parables and gospels of grace. Learning will be a priestess of truth. The imagination of man will wander and wander in the wide creation, free, fearless, and glad, knowing that the Father's house is everywhere, and that his child may be everywhere at home."

In many of the pioneer households of Colorado, whether

those of plenty or of privation, the children had the inestimable advantage of the refined and beautiful atmosphere of a home in which high ideals and lofty devotion to intellectual progress and spiritual culture prevailed. If schools were insufficient, there were the trained educational methods of both the father and the mother under which they were reared and taught; and poverty of purse cannot greatly matter where there is no poverty of the spirit.

Well may these pioneers of Colorado be held as belonging to that order of humanity which the poet calls "The Beginners." Some of them were unlettered and untaught save in the great school of life itself; some of them were rich in learning and culture; but they all shared in common a devotion to progress differing only in degree or conception: they shared common sacrifices; they gave their best energies to the development of a great and beautiful state whose increasing rate of progress is to them an immortal monument. These leaders of humanity whom the poet so finely characterizes as "The Beginners" are an order of people always appearing on earth. They are of those who hear the Song in the air and behold the Star in the sky. They are the persons who discern — and follow — The Gleam. Their lives are rich in service and sacrifice. Their kingdom is not of this world. Their lives are not unfrequently cheerless and cold, but on their altar fires glows the living coal sent down from heaven. They fast that others may feast. They accept privations that others

may revel in possessions. They pay the inexorable price for the same great purchase. They are those who are sent on earth peculiarly set apart to co-operate with God in the larger fulfilment of the divine laws. They pay the inexorable price of toil and labor and sorrow and sacrifice. They rise into the everlasting triumph and the beauty and the joy of spirituality of life. They give all for this; they find all in it. But let no one resign his hopes or his dreams. Let no one doubt, for an instant, that all of goodness and beauty and sweetness and joy that he longs for is on its way toward him. It is only a question of time. Let him be patient, which is not a mere passive and negative condition, but one full of intense activities and serene poise; let him be patient and believing, and make room in his life for that immortal joy which no man taketh from him.

The town of Greeley, with its felicitous location midway between the two state capitals, Denver and Cheyenne, fifty miles from each, and which is already the principal town of Northern Colorado as Pueblo is of the southern part of the state, has a romantic and thrilling story connected with its founding. In the history of Colorado, among the many men whose lives stand out in noble preeminence, was that of the founder of Greeley, Hon. Nathan Cook Meeker, whose personal life is inseparably associated with the interesting town which owes to him its origin.

The Meekers trace their ancestry to men who went to

England from Antwerp about 1500. In 1639 Robert and William Meeker came to this country and settled in New Haven. Thirty years later William Meeker removed to New Jersey, and the town of Elizabeth was founded by him and named for his wife. He was a leader in the affairs of the day, held prominent office, and in 1690 he died, leaving the old Meeker homestead in Newark, New Jersey, which is still in the possession of his descendants. One of his sons was Joseph Meeker, also prominent in promoting the conditions of progress, and he was the grandfather of Nathan Cook Meeker, the founder of Greeley, who inherited the qualities that have made the family a marked one in America. When he was but seventeen he carried on an extensive correspondence with Henry Clay, John Tyler, George D. Prentice, and other noted men of the day, discussing with them subjects of importance, and he was a contributor even in these early years to the "Louisville Journal," then edited by George D. Prentice, and now the "Courier-Journal," edited by the brilliant Colonel Henry Watterson; to the New Orleans "Picayune," and other leading papers. Even in his early youth Mr. Meeker seems to have been a man of perpetual aspiration and honorable ambition carried out to achievement, and by means of his own energy and persistence he graduated in 1840 from Oberlin College, became a teacher, and later (for literary work was his dominant gift) became a regular contributor to the "New

York Mirror," edited by N. P. Willis, the poet, and the most brilliant man of letters of his day. Mr. Meeker wrote both prose and poetry, — essays, romance, and verse alike flowing from his facile pen. He is the author of three books, one of which he dedicated to President Pierce, and which is in the Boston Public Library among the choice and rare works not allowed for general circulation but kept intact for the special use of scholars and researchers. He became one of the leading writers of the day on sociology, advancing many ideas which are to-day maintained by thoughtful students of the questions involved in this subject.

Founding towns seemed to "run in the family," and even as his great-grandfather founded the town of Elizabeth, New Jersey, so Nathan Cook Meeker felt the impulse to stamp his own strong and progressive individuality on new communities. He became the secretary and librarian (in 1844) of the Ohio Trumbull Phalanx, a colony founded to realize in practical form the theories of Fourier, and somewhat similar to the famous Brook Farm experiment. Mr. Meeker also co-operated in founding the Western Reserve Institute, of which, many years afterward, Hon. James A. Garfield became president.

About this time he married Arvilla Delight, a daughter of Levi Smith of Connecticut and a descendant of Elder Brewster; a woman whose singular force, exaltation, and beauty of character may be traced through a notable

New England ancestry. The family soon removed to the Western Reserve in Ohio. Mrs. Meeker had been known in her sweet girlhood as the beauty of the town. She was a woman of exceptional refinement and culture; for many years a teacher, and, more than all, of a spirituality of character that added to her life its dignity and grace.

The spell of destiny, the burden always laid upon "The Beginners," seemed to be on Nathan Cook and Arvilla Delight Meeker; for no history of the work of the husband could be written that did not include that of the wife. Like Nathaniel and Sophia Hawthorne, their lives were conjoined in that perfect mutual response of spiritual sympathy which alone makes the mystic marriage a divine sacrament.

Horace Greeley became interested in Mr. Meeker's work and invited him to a place on the editorial staff of "The Tribune," a position which he filled with conspicuous ability for several years; but in common with all idealists, Mr. Meeker was haunted and beset by his visions of a more Utopian future for humanity. A Colorado journal, recently giving some reminiscences of the life of its great citizen, said:

"In the fall of 1869 Mr. Meeker made a trip to the West for the 'Tribune,' writing interesting letters by the way. On his return to New York he was full of the idea of estab-

lishing a colony in Colorado. He mentioned his ambition to John Russell Young, who talked it over with Mr. Greeley, and that great man, at the first opportunity, said to the returned correspondent: 'I understand you wish to lead a colony to Colorado.' When Mr. Meeker answered 'Yes,' Greeley added, 'I think it would be a great success. Go ahead; "The Tribune" will stand by you.'

"With such encouragement Mr. Meeker spent the following day in writing the article announcing his purpose and outlining the plan which was afterwards adopted as the constitution of the colony. Mr. Greeley suggested a few minor changes, after which the article was printed and kept in type for a week, in order, as its author said, 'that there might be due reflection and no haste.' It was published in the 'Tribune' of December 14, 1869, with an editorial indorsement of the plan and its originator. Nine days later the colony was organized, and yet in that short time more than a thousand letters had been received in answer to the article. On the 15th of the next April the certificate of organization of 'The Union Colony of Greeley' was filed for record."

In less extended detail some outline of the life of the founder of Greeley, the "Garden City" of Colorado, has already been narrated by the writer in a previous book;[1] but no adequate reference can be made to the state in which Mr. Meeker's life and work remains as so remark-

[1] The Life Radiant: Little, Brown, & Company, 1903.

able a contribution and so fundamental a factor, which does not present in full the story of his relation to its development; and the matter is thus presented even at the risk of some minor repetitions.

In the spring of 1870 Mr. Meeker led his colony to Colorado. The colonists wished to give the town the name of its founder, but he himself insisted that it should bear the name of Greeley, after the great editor of the "Tribune," of whose staff he was still a member. Into all the sacrifice and the hardships of this pioneer life Mrs. Meeker, a woman gently born and bred, entered with the utmost heroism. From the very inception the undertaking was a signal success. But Mr. Meeker conceived of still another extension of his activities in the problem then so prominently before the country, — the civilization of the Indians. He was appointed agent of the northern Utes, in possession of the great park region of the Rocky Mountains, on White River. To it he went in the same spirit in which General Armstrong entered on his work at Hampton. He had matured certain theories regarding the proper treatment of the Indians, in bringing them within the pale of the civilized arts, — theories so wise, so just, so humane, that they might be studied with advantage. These theories he put to the test. His youngest daughter, a beautiful and gifted girl, opened a free school for teaching the Indians. His wife united with him in every kindly and gracious act by which he strove to win

the confidence of the race. This kindness and gentleness was unmeasured. The family lived a life of constant sacrifice and effort for the education and training of the Utes. But the Indian nature is one that wreaks its revenge, — not necessarily on the aggressor, but on the first comer. Other agents had been lax, and a number of causes of discontent to which allusion cannot here be made fanned the smouldering fire. Their chief complaints were that they were required to work, and to abandon a bit of pasturage, only a few acres, for the new agency grounds and gardens. Events drew on like the fates in a Greek tragedy, and on the morning of September 29, 1879, Mr. Meeker was cruelly massacred.

The little town of Meeker marks the site of the Meeker massacre. Here is a little village of a thousand inhabitants, located on White River, among the most beautiful of the mountain ranges, — the location being very much like that of Florence, in Italy, — which is the centre of a very rich agricultural and grazing region. Meeker is now forty-five miles from a railroad, the nearest station being Rifle, on the Denver and Rio Grande, a few miles from Glenwood Springs; but the Moffet road brings to it railroad connection with Denver. There is an extensive stage line of over one hundred miles, starting from Rifle and going on through Meeker up into the mountains, where the hunting attracts a great number of travellers, and especially many Englishmen. It is in

this region that President Roosevelt's happy hunting-grounds lie, and he is a familiar and favorite figure in Meeker.

There is a little gray-stone Episcopal church among other churches that adorn this town, which has laid out a handsome park and which has the perpetual adornment of the beautiful river that flows through it. The mountains about supply streams that make irrigation easy, and the great fields of wheat, potatoes, and alfalfa are fertile and prosperous. Irrigation makes it everywhere possible to control the climatic conditions.

Meeker is the county seat of Rio Blanco County, in which uranium has been discovered in two different places; and two oil wells, each at a cost of four thousand dollars, a creamery, costing nearly six thousand dollars, and water-works at a cost of sixty thousand dollars, have been established within the past two years. Fifteen reservoirs and eighty miles of irrigation ditches were constructed in 1905, and in that year was harvested, in this county, a quarter of a million bushels of wheat, oats, and rye.

The basis on which Greeley was founded is thus outlined in the official documents drawn up by Nathan Cook Meeker:

"I propose to unite with proper persons in the establishment of a Union colony in Colorado territory. A location which I have seen is well watered with streams and springs;

there are beautiful pine groves, the soil is rich, the climate healthful, grass will keep stock the year round, coal and stone are plentiful, and a well-travelled road runs through the property."

Mr. Meeker proceeded to note the cost of the land, — eighteen dollars for every one hundred and sixty acres, — and he especially called attention — for he had the poet's eye — to the grandeur of the Rocky Mountain scenery, and he added:

"The persons with whom I would be willing to associate must be temperance men and ambitious to establish good society, and among as many as fifty, ten should have as much as ten thousand dollars each, or twenty should have five thousand dollars each, while others may have from two hundred dollars to one thousand dollars and upward. For many to go so far without means could only result in disaster."

The practical wisdom of this clause will be appreciated. The true idealist is the most practical and wisest of counsellors. It is only false idealism that leads to destruction. Mr. Meeker's idea was to make the settlement a village, with ample building lots, and then to apportion to each family from forty to one hundred and sixty acres outside for agriculture.

On such a basis as this the Union Colony of Greeley was founded. A constitution was adopted that is a model of the condensation of the duties of good citizenship. In-

dustry, temperance, education, and religion were the pillars on which the superstructure was raised. It is little wonder that the social quality of Greeley to-day — thirty-six years after its inauguration as a community — is of the highest type and exceptional among all the cities of the United States.

Irrigation was the first necessity. A canal thirty miles long was dug, costing sixty thousand dollars. The Cache la Poudre was first examined and then tapped to furnish water. The elevation of the surrounding high bluffs secured the needed descent for the flow of water. The life began.

Greeley is now a town of some seven thousand inhabitants; the seat of the State Normal College, which its president, Dr. Z. X. Snyder, has made one of the great educational institutions, not only of Colorado, but of the United States; a college that draws students from almost every section, even from New England, so able is President Snyder's course of instruction and so admirable are the opportunities it affords for subsequent connection with the fine public school system in Colorado. A position in any of these offers a higher salary than can be obtained in the East, to say nothing of many other advantages associated with the work. Dr. Snyder was one of the eminent educators of the East; and when some sixteen years since he accepted his present responsible office, he brought to it the best traditions of Eastern culture

and united them with the zeal and freedom and infinite energy of the West. The Normal campus of forty acres on high ground, overlooking the town, with President Snyder's residence in the grounds and other college buildings near, comprise a beautiful feature of Greeley. The western view, both from the college and from the home of President and Mrs. Snyder, over the mountain range including Long's Peak, is one of almost incomparable beauty. The faculty of the State Normal comprises thirty specialists; there is a library of thirty thousand volumes; the laboratory has the latest scientific equipment of the day; the art department and the music course are admirably conducted; French, German, and Italian are taught according to the latest language methods; and athletics, domestic science, nature studies, all receive due recognition. The "Training School" of the State Normal College has an attendance of nearly five hundred, and the graduates of this institution begin work on salaries ranging from five hundred to twenty-five hundred dollars annually. The tuition is free to all citizens of Colorado.

The many churches, the excellent public schools, the clubs and societies for social enjoyment and improvement, indicate the high quality of life in Greeley. There are three newspapers; and of these the "Greeley Tribune," founded by Mr. Meeker and now under the able editorship of Mr. C. H. Wolfe, has created for itself more than

a local reputation. Financially, Greeley stands well, with its several banks and its solidity of resources.

There is hardly a shabby house to be found in all the town, whether of residence or business. Every building has a neat and thrifty aspect, and the art of architecture has been especially studied, for almost without exception every house, whether large or small, is tasteful and attractive. A bay window is thrown out here, a little balcony there, a piazza, a loggia, an oriel window, and the eye is gratified. But, besides this dainty and tasteful architecture, the one great feature of Greeley is her beautiful streets. These are due directly to the taste and the direction of the founder, Mr. Meeker. The streets are one hundred feet wide, lined invariably — every street in the town — with a double row of shade trees, giving coolness, beauty, and contributing much to the modification of the temperature. Every deed granted in Greeley forbids the sale of any intoxicating liquor. There is not a saloon in the place. There is not a loafer or a criminal, nor are there any poor in the unfortunate sense of the large cities. No police are needed. The jail is locally known as a mere ornamental appendage to the fine forty thousand dollar courthouse.

For many years it has been felt that some expression should be made in honor of the memory of the founder of Greeley, and this has now taken form in the project for the " Meeker Memorial Library," which is in preparation.

The beautiful young city is itself, however, the best memorial of its noble founder. It is a living monument of perpetually increasing greatness and beauty; and who to-day can wander under the shade of the beautiful trees which in a double row line every street and boulevard — trees planted in 1870 under Mr. Meeker's personal superintendence — without hearing amid the rustle of their whispering leaves the poet's words, that fall like a benediction:

> "Be of good cheer, brave spirit; steadfastly
> Serve that low whisper thou hast served; for know,
> God hath a select family of sons
> Now scattered wide thro' earth, and each alone,
> Who are thy spiritual kindred, and each one
> By constant service to that inward law,
> Is weaving the sublime proportions
> Of a true monarch's soul. Beauty and strength,
> The riches of a spotless memory,
> The eloquence of truth, the wisdom got
> By searching of a clear and loving eye
> That seeth as God seeth. These are their gifts,
> And Time, who keeps God's word, brings on the day
> To seal the marriage of these minds with thine,
> Thine everlasting lovers. Ye shall be
> The salt of all the elements, world of the world."

The glamour of romance can never fade from Colorado, whose entire history is one of heroic deeds and splendid energy; but the primitive stage of the state is already left far behind with the nineteenth century. In its intellectual and scientific development the years of the twentieth cen-

tury have almost exceeded its twenty-four years of life as a state in the nineteenth. The tide of immigration still continues, but from being the objective point of mining activities where fortune hunters rushed to find a royal road to riches, it is now a state of agriculture and of commerce. Social conditions are thus altered; and though some of these conditions are those of mining regions, as in the Cripple Creek district, they have altered from the typical Bret Harte mining-camp life to those of orderly progress, — to the life dominated by twentieth-century ideals of humanity; the life whose framework is seen in public-school systems, in religious observance, in the liberal reading of periodical and other literature, and in the maintenance of public libraries as a necessity in every community.

The dawn of literary and artistic development in Colorado is very evident, — a dawn that is already of such radiant promise as to forecast the day when this state shall contribute to our greatest national literature. A large number of individual writers could already be named whose work in books, magazine articles, and excellent journalism might well be held as typical of the best culture of the entire country. The first wild turmoil of a new and richly varied state has given way to a prosperous, progressive commonwealth. Material progress must still always precede the higher growth, yet the air is vital with ideas, and the vision of Colorado is always toward the

stars. The beauty and majesty of the environment cannot but react upon the people. The growth of women's clubs has been one steady factor of progress, with most favorable effect on all the general life of intellectual and moral advancement. The public libraries in every centre establish and develop the reading habit. While a love for beauty is an element in human life, the influence of the transcendent majesty and incomparable sublimity of the Colorado scenery will continue to prove a source of inspiration to the mental and moral life of the people. The changing colors of the mountains are a constant delight. Colorado offers a perpetual feast of beauty. Her resources are infinite. Colorado combines all the exaltation of the untried with an abundance of the conveniences and luxuries of the older civilization; and of this Centennial State it is difficult to record facts and statistics that do not seem to suggest the tales of a thousand nights. With resources and with scenic loveliness which no language could exaggerate, it is still only to those who themselves know and appreciate the grandeur of this state that any interpretation of it will appear as rather within than as at all beyond the limits of the most statistical and demonstrable facts. The East has already outgrown the tradition that the entire trans-Mississippi region is a howling wilderness. Colorado is no longer as vague as is Calcutta to the average mind. Dr. Edward Everett Hale exclaimed that he desired his sons to know that there was something in the

world besides Beacon Street, and this ambition has of late years become too prevalent to leave even the extreme East in any absolute and total ignorance of the wonderful West. Still it may be true that the flying visions from Pullman-car windows are marvellously extended and intensified by increasing familiarity with the almost incredibly swift progress of this region.

A typical illustration of the fallibility of human judgment is seen in the attitude taken in 1838 by the great Daniel Webster on the floor of the United States Senate against an appropriation for a post route west of the Missouri River.

"What do we want," said he, "of this vast worthless area, — this region of savages and wild beasts, of deserts, shifting sands, and whirlwinds of dust, of cactus and prairie dogs? To what use could we ever hope to put these great deserts, or these endless mountain ranges, impregnable and covered to their base with eternal snow? What use have we for such a country? Mr. President, I will never vote one cent from the public treasury to place the Pacific Coast one inch nearer Boston than it is to-day."

It is a far cry from this "vast worthless area," as Mr. Webster termed it in 1838, to the grand and richly promising state of to-day, with its splendid young cities where art and science unite with literature and ethics in the rapid development of social progress; with its mountain ranges climbed in palace cars; its electric transit and electric lighting; its

vivid and forceful achievements, that even in each decade concentrate the progress of a century, as seen in the past.

It is not a mere vagary, but rather a practical and momentous fact, that Colorado is peculiarly the realm receptive to invisible potencies and mental impressions. Science is now confronted with the question as to whether thought and electricity may be identified as the same force under different degrees of manifestation. "There is an elemental essence — a strange living force — which surrounds us on every side, and which is singularly susceptible to the influence of human thought," says an English scientist, and he continues: "This essence responds with the most wonderful delicacy to the faintest action of our minds or desires; and this being so, it is interesting to note how it is affected when the human mind formulates a definite thought or desire." All the significance of a thousand years may be concentrated in an instant's thought, as all the heat stored up in all the forests of the world is concentrated in a small quantity of radium. Emerson embodies this truth in the stanza:

> "His instant thought a poet spoke,
> And filled the age his fame;
> An inch of ground the lightning strook
> But lit the sky with flame."

It is intensity, not duration, that is of consequence, and that determines results. To state that there is something in the Colorado air that incites active and lofty thought;

that uplifts the soul and enables one to discern the practical processes for identifying the most marvellous scenic grandeur of the civilized world with the most advanced processes of applied industries, is to state a simple fact. Phillips Brooks once said:

"I know no ideal humanity that is not filled and pervaded with the superhuman. God in man is not unnatural, but the absolutely natural. That is what the incarnation makes us know. . . . The truths of heaven and the truths of earth are in perfect sympathy. . . . The needs of human nature are supreme, and have a right to the divinest help."

The early explorers and pioneers in Colorado felt this truth, so finely stated by Bishop Brooks, even if they did not formulate it in words. The apparently insuperable obstacles of a land where the desert disputed the space with the Titanic mountain ranges piled against the sky, incited them to effort rather than paralyzed their energy. It is fitting that this most ideal state, rich in resources of almost undreamed-of variety and importance, should present a significant object lesson in the working out of the problem involved in the higher civilization of the twentieth century. The future of Denver, of Pueblo, Colorado Springs, Greeley, and other important centres, is a most important part of the future of the nations. The Star of high destiny shines on the Centennial State.

CHAPTER VI

THE SURPRISES OF NEW MEXICO

"But my minstrel knows and tells
The counsel of the gods,
Knows of Holy Book the spells,
Knows the law of Night and Day,
. . . . .
What sea and land discoursing say
In sidereal years."

EMERSON

NEW MEXICO is the scene of surprises. Traditionally supposed to be a country that is as remote as possible from the accepted canons of polite society; that is also an arid waste whose temperature exceeds the limits of any well-regulated thermometer, — it reveals itself instead as a region whose temperature is most delightful, whose coloring of sky and atmosphere is often indescribably beautiful, and whose inhabitants include their fair proportion of those who represent the best culture and intelligence of our country. New Mexico has a mixed population. To a hundred and sixty thousand Americans there are a hundred and twenty-five thousand of Spanish or Mexican descent; a few hundred Chinese and Japanese, and some thirteen thousand Indians, who are, however, peaceful and

ACOMA, NEW MEXICO

industrious, and a proportion of whom have been educated in the Government schools for the Indians.

The altitude of New Mexico seldom falls to less than five thousand feet, so that the air is cool and exhilarating. The rock formations partake of the same rich hue that characterizes those in Colorado and in Arizona, and as the soil is rich there is a continual play of color. The scenery is one changeful, picturesque panorama of mountains, rock, or walled cañons, vast mesas, uncanny buttes, and lava fields left by some vanished volcanic fires. The ancient Indian pueblos are still largely inhabited, and strange ruins of unknown civilizations add their atmosphere of mystery. The mouldering remains of the old Pecos church and the strange communistic dwellings in the old Pueblo de Taos; the ruins of the fortress and the seven circular mounds, which were the council-chambers and halls for mystic rites of the prehistoric civilization; and the fabled site of the ancient Aztec city where tradition says Montezuma was born, — all contribute to a unique interest in this "land of the turquoise sky," as New Mexico is called.

Acoma, the ancient pueblo perched on a perpendicular precipice four hundred feet high, with its terraced dwellings of adobe, its gigantic church, its reservoir cut out of solid rock, and its inhabitants with their strange customs, is fairly accessible to the traveller from Albuquerque by a drive of some twenty miles. Mr. Lummis calls it "the most wonderful pueblo," and "the most remarkable city in

the world," as compared, of course, with other pueblos and ruined cities. Acoma has a present population of some four hundred Indians, and its romantic beauty of location is unparalleled. There are scientists who incline to believe that the original Acoma was built on the top of the *Mesa Encantada*, — the "Enchanted Mesa," — a sheer, precipitous rock seven hundred feet high which is now practically unscalable; although Mr. F. W. Hodge, of the Bureau of Ethnology, achieved this apparently impossible feat, and found what is, in his convictions, unmistakable evidence of human habitation, supporting the traditions regarding this colossal rock. Some mighty cataclasm of nature swept the approach away; but if ever there were human habitations on the "Enchanted Mesa," the period is lost in prehistoric ages.

The colossal church in Acoma is a striking feature. Its walls are ten feet in thickness and sixty feet high, and the church and yard in which it stands consumed forty years in their construction. It was only reached by rude stairs cut in the rock. Dim traditions, which are perhaps hardly more than speculative theory, suggest that these steps of approach were suddenly swept away by some convulsion of nature at a time when the men of this prehistoric pueblo were away hunting, or otherwise engaged in procuring means of sustenance, and that the women and children were thus cut off from all supplies and aid and left to starve. Mr. Lummis has a theory that seems to him

THE ENCHANTED MESA, NEW MEXICO

possible, if not probable, that there was a ledge of neighboring rocks which served as ladders to the *Mesa Encantada*, and that these rocks were swept away by some frightful storm, or some sudden convulsion of nature, during the absence of the men; and that a new city — the present Acoma — was then built on the lesser rock on which it now stands. Acoma was old even when Coronado, in 1540, made his expedition through the country, from which period the authentic history of New Mexico begins with the meagre records of the heroic friars and the memorials of the Spanish conquerors. Laguna, a pueblo founded in 1699, lies twenty miles from Acoma on the Santa Fé route, of which it is one of the interesting features. All these old Spanish missions, which are found in more or less degrees of preservation in all this chain of pueblos in the valley of the Rio Grande, contain ancient paintings and statues of saints. Largely, the paintings are crude and worthless, but there exist those that have legitimate claim to art as the work of Spanish artists not unknown to fame. Among these is the painting of San José in the mission at Acoma, a painting presented by Charles II of Spain. This mission was founded by Friar Ramirez, who dedicated it "To God, to the Roman Catholic Church, and to St. Joseph," — who was the patron saint of this pueblo.

There is an amusing legend that Laguna, submerged in all manner of disasters, looked on the prosperity of Acoma

and ascribed it wholly to the influence of this picture of the saint before which the people made their daily adorations and laid their votive offerings. Laguna believed that San José would invest it with the same felicities enjoyed by the neighboring city, could they only secure the portrait, and their urgent plea to borrow it for a time was granted by Acoma. Their confidence in the saint was justified; peace and plenty again smiled on Laguna, and they made their daily devotions before the great picture. At length, so runs the legend, Acoma reminded Laguna that a loan was not a gift, — to be held in perpetual fee, and demanded its return. The faithless people of Laguna declared it was their own, — and the case actually went into litigation and was tried in Court. Judge Kirby Benedict, after hearing all the evidence, decided in favor of Acoma, but the picture had mysteriously disappeared. The messengers sent from Acoma to bring the sacred treasure at last discovered it under a tree half-way between the two pueblos. They instantly recognized that the saint, rejoiced at the righteous decision, had started on his homeward journey of his own volition. The last one of the Franciscan friars to minister in New Mexico was Padre Mariano de Jesus Lopez, whose work was in Acoma, the "city in the sky." Of all the cliff-built cities, Acoma is the most marvellous. Its terraced dwellings seem, as Mr. Lummis so graphically says, to be "the castles of giants," for "the lapse of ages has carved the rocks into

LAGUNA, NEW MEXICO, ON THE SANTA FÉ RAILROAD

battlements, buttresses, walls, columns, and towers, and the view from this cloud-swept city is one never to be forgotten. On this cliff the sand rises and falls like the billows of the sea."

No latter-day interest of contemporary life, either in the romantic scenery or the potential development of New Mexico, can exceed the richness of its prehistoric past and the marvels of this ancient civilization that yet remain. Alluding to these wonderful monumental remains, Colonel Max Frost, of Santa Fé, who knows his territory in every aspect of its life and its attractions, says:

"The Pajarito Cliff-dwellers' Park, the Chaco Cañon, the Gila Cañon, western Valencia and Socorro counties abound in cliff and communal buildings, the age of which has puzzled scientists, but which are older than any other ruins on the American continent, and probably in the world. The most accessible cliff-dwellers' region is the Pajarito Park, only one day's overland trip from Santa Fé or Española, in which twenty thousand cliff-dwellings and caves are situated within a comparatively small area. The scenery of this natural park is superb; 'wonderful' is the only adjective that will do justice to the caves in the cliffs, high and inaccessible almost as eagles' nests, but showing many other signs of occupation besides the peculiar picture writings in the soft volcanic tufa of which the cliffs are composed. In addition to the cliffs, there are remains of communal buildings of later occupation, some of them containing as high as twelve hundred rooms.

There are also burial mounds with remains of ancient pottery. Along the eastern foot of this steep plateau flows the Rio Grande and lie the villages of San Ildefonso, Santa Clara, and San Juan, while to the west rise the stupendous mountain masses of the Valles, the Cochiti and Jemez ranges, with their deep forests and cañons, their famous hot springs, their Indian villages, and their mines. Where else on earth is there so much of the beautiful in scenery, of romance, of historic monuments, of prehistoric remains, of the ancient, the unique, the picturesque, the sublime, to be found as within a radius of fifty miles of Santa Fé? One day's trip will take the wanderer from the historic Old Palace and San Miguel Church in the City of the Holy Faith, over the foothills of the Sangre de Cristo range, from which rise in full view mountain peaks almost thirteen thousand feet high, into the picturesque Tesuque Valley and by the ancient Indian pueblo of Tesuque. The road winds through sandhills that the air and the rain have cut into grotesque shapes, huge as Titans and weird as the rock formations in the Garden of the Gods. Then come once more fertile fields and the village of Cuymungue, formerly an Indian pueblo, now a native settlement. Along the Nambe River, with its grand falls, close by the Indian pueblo of Nambe to the pueblo of San Ildefonso on the Rio Grande; then along that river through the laughing Española Valley, past the Black Mesa, a famous Indian battleground, into the large Indian pueblo of Santa Clara and its mission church to Santa Cruz, also with a quaint and ancient church building, threads the wagon road across the river into Española. From

there the road ascends the wildly beautiful Santa Clara Cañon, along a rippling trout stream up to the steep cliffs of the Puye and the Shufinne, with their hundreds and thousands of prehistoric caves and communal buildings. And all that in one day's journey overland! If the trip be prolonged another day or two, the remarkable hot springs at Ojo Caliente and the hot springs in the deep chasm of the Rio Grande at Wamsley's, the Indian pueblos of Picuris and Taos, the finest trout streams and best haunts of wild game, or the Jicarilla Indian Reservation, as well as busy lumber and mining camps, can be visited. And that is only in one direction from Santa Fé! Going south, one day's trip will pass through the quaint settlements of Agua Fria, Cienega, and Cieneguilla, by the Tiffany turquoise mines, the old mining camp of Bonanza, the smelter at Cerrillos, the Ortiz gold placers, worked a hundred years before gold was discovered in California and still yielding gold dust and nuggets, the coal mines at Madrid, where bituminous and anthracite coal have been mined from the same hillside, the placer and gold mines of Golden and San Pedro, not to speak of sheep and cattle ranches and the beautiful scenery of the Cerrillos, Ortiz, San Pedro, and Sandia mountains.

"Another trip of one day from Santa Fé will take the traveller by the pueblo ruins of Arroyo Hondo over Apache hill, the battlegrounds of Apache Springs, the interesting native settlement of Cañoncito, over Glorieta Pass and the battlefield of Glorieta, to the upper Pecos River, by the ancient and historic Pecos church ruins, the village of Pecos, and through

the most beautiful summer-resort country in the Southwest, where trout streams babble in every cañon and where from one summit can be surveyed the hoary heads of eleven of the twelve highest peaks in New Mexico.

"Another day's trip out of Santa Fé will take the visitor up the rugged Santa Fé Cañon, by the large reservoir and the Aztec mineral springs to the Scenic Highway, which crosses the Santa Fé range into the upper Pecos Valley and unfolds at every step new mountain views and panoramas magnificent beyond description. Nor do these trips exhaust the interesting points in and about Santa Fé. Almost every other town in the territory offers sights and scenes of equal interest to the tourist and sightseer.

"The prehistoric ruin of the Chaco Cañon and Pueblo Bonito, in southeastern San Juan County, as well as those at Aztec, in the same county, are more fully excavated than those of the Pajarito Park, and in some respects are more palatial and more impressive. They can best be reached from Gallup or Thoreau on the Santa Fé Railway in McKinley County.

"The prehistoric ruins on the Gila Forest Reserve, as well as those in western Valencia and Socorro counties, have not been thoroughly explored thus far, being distant from the highways of travel; but on this very account they should have a special charm and attraction for the student of archæology.

"Coming to more recent, although still ancient days, the ruins of the Gran Quivira and of nearby abandoned pueblo

CLIFF DWELLER RUINS, NEAR SANTA FÉ, NEW MEXICO

STONE TENT. CLIFF DWELLERS, NEW MEXICO

villages, between the Jumanes Mesa and the Mal Pais and Jornado del Muerto, are of great historic interest. They are best reached from the station of Willard at the junction of the Santa Fé Central and Eastern Railway of New Mexico. Similar ruins are found in western Valencia, Socorro, and other counties, and divide the interest of the tourist with the many present-day Indian pueblos and Spanish settlements boasting of considerable antiquity. The Zuñi, Navaho, Jicarilla, and Mescalero Indian reservations are well worthy a visit, and upon the first two named are many prehistoric ruins.

"Foremost in interest and value in historic archæology are the old mission churches of the Franciscans. In every occupied Indian pueblo and at the site of almost every abandoned pueblo, there is one of the monuments of those pioneers of Christianity and civilization, the Franciscan Fathers. Many of these are in a good state of preservation, while others are in ruins, but every one is an object of historic interest.

"The old mission church of San Diego, which is the oldest of the California missions, was founded in 1769. It is almost a total ruin; only the front remains in a good state of preservation. The side walls are still standing, but no portions of the roof or interior remain. This is the most venerable and venerated historic monument in the state of California, and is annually visited by thousands of tourists. It has stood for one hundred and sixty-four years. It marks the beginning of civilization and Christianity in California. And yet, in

New Mexico, on the upper Pecos, thirty-five miles west of Las Vegas, at the site of the abandoned Pueblo of Cicuye, are the ruins of the old Pecos church. The church is three hundred years old. It was nearly one hundred and fifty years old when the San Diego mission was founded. It was projected before the Spanish Armada was destroyed and antedates the coming of the Mayflower and the settlement of Jamestown. All that is said of the old Pecos church may be said of that of Jemez. They were built at the same time. The one at Gran Quivira was founded in 1630, and is a fairly well-preserved ruin. The churches at San Ildefonso and Santa Clara are in a complete state of preservation. They are nine years older than the oldest of the California ruins. The old San Miguel mission in Santa Fé has been rebuilt. Its walls date from 1650, the roof from 1694, or possibly a few years later. From the old church at Algodones was taken a bell, cast in Spain in 1356, and at the Cathedral at Santa Fé and other churches are ancient relics and art treasures of old Spanish and Italian masters. These are only a few examples selected at random from the large number of ancient churches of equally great interest scattered over New Mexico. Inscription Rock, on the old road to Zuñi, and every one of the pueblos from Taos on the north to Isleta on the south, and from the Rio Grande pueblos in the central part to Zuñi in the west, are worthy of a visit, both for historic and present-day interest.

"Nor is there any other building in this country to compare in historic interest with the Old Palace at Santa Fé,

which has been more to New Mexico than Faneuil Hall to Massachusetts or Liberty Hall to Pennsylvania, nor is there any other town in the United States which offers so much of interest to the tourist as the city of St. Francis d'Assisi."

It is no exaggeration to say that in many respects the archæological interest of New Mexico, its atmosphere, its historic color, is as distinctive as that of Egypt or of Greece, Italy, or Spain. When, on December 15, 1905, the first long-distance telephone in Santa Fé established communication *viva voce* with Denver, while within a radius of fifty miles, ruins of prehistoric civilization fascinated the tourist, — surely the remote past and the latest developments of the present met and mingled after the fashion of "blue spirits and gray." Very curiously mixed is the civilization of New Mexico. It can almost be said to lie in strata, like geologic testimony. The ancient peoples whose very name is lost, — shrouded in antiquity that has closed the chapters and refuses to turn the pages for the twentieth-century reader; the Indian population; the Spanish, whose explorers — Alvar Nuñez, Cabeza de Vaca, Coronado, Juan de Oñate, and others — and whose missionaries, from the ranks of the Franciscan friars, brought to the savage land the first message of modern civilization; and the American, which within almost the past half-century has established itself since that August day of 1846 when General Kearny floated the stars and stripes from the "Old Palace" in Santa Fé.

The American civilization and high enlightenment has poured itself into this "Land of the Sun King," — the "Land of the Turquoise Sky." For now, as Colonel Frost has so ably and comprehensively noted, "New Mexico is strictly up to date in its government, in its hotels, its railroad accommodations, in the protection the law affords, in its universities, colleges, public schools, sanitariums, charitable institutions, its progress, and in its prosperity. Churches are found in every settlement, newspapers in every town, together with fine stores, banking institutions, and every safety, comfort, and luxury that the centres of civilization of the East afford." If that vivid and inspiring group of the Muses, — the muse of History, of Science, of Philosophy, and others, — painted by Puvis de Chavannes to adorn the court of the grand stairway of rich Siena marble in the Public Library of Boston, — an achievement in modern art that alone would immortalize the great painter of France, — if these Muses could visit New Mexico, the specialty of each would be found. The richly historic past that has left its various records; the present, that has impressed into its service every power of science, of engineering, of architectural construction, of agriculture, and of social progress, would furnish to each a vast field in its own especial domain.

A work published in Paris somewhere about the middle of the nineteenth century, entitled "*Memoires Historiques*

sur La Louisiane," — a book that has never been translated, — gives an account of a French expedition in New Mexico in search of a mine of emeralds and their encounter with the Spanish forces; but although in this engagement the Spanish troops suffered disaster, the Spanish civilization still continues, while there is little permanent trace of the French in New Mexico. It is a curious fact, however, that the present continues this varied and strangely assorted grouping of races which characterized the country in its earliest days.

New Mexico reminds one of Algiers. There is the same Oriental suggestion of intense coloring, of dazzling brilliancy of sky, of gleaming pearl, of floating clouds.

There is one feature of this trans-Continental trip which is of the first importance to the tourist, and this is the line of artistic and beautiful hotels built after the old mission design, the architecture felicitously harmonizing with the landscape, — those Harvey hotels built in connection with the Santa Fé stations at principal points, as at Trinidad, Las Vegas, Albuquerque, and others, all christened with Spanish names, — the "Cardenas," the "Castañeda," the "Alvarado," — all of which are conducted with a perfection of cuisine and service that is rarely equalled. The social and the pictureque charm of the long journey is singularly enhanced by the leisurely stops made for refreshment; the leaving the long train — with its two engines, one at either end — for the little exer-

cise in fresh air gained by going into the dining-rooms; being able to procure papers at the news stands, fruit, or other delicacies, and enjoying the scenery and gaining some knowledge of the place. In connection with the Alvarado, at Albuquerque, are two buildings: one that offers a most interesting museum of Indian archæological and ethnological collections, and the other showing native goods from Africa and the Pacific islands. Salesrooms connected with these enable the traveller to purchase any souvenir from a trifle, to the costly baskets, richly colored Navajo blankets, the strange symbolic pottery, or the objects of religious rites.

A day's delay at Albuquerque enables the traveller to visit four interesting pueblos, — Santa Ana, Sandia, Zia, and Jemez, — in a day's stage ride between Jemez and Albuquerque. At all these important stations on the route the Santa Fé has established free reading-rooms for its employés, fitted up with every comfort.

New Mexico, while partaking in the general fascination that invests all the great Southwest, is especially not only a land of enchantment, but a land of opportunities. It is a country of untold latent wealth, of uncalculated resources. There are vast tracts of soil that are ready for the cultivation they will so bountifully repay; there are over three hundred mining districts, few of which are developed. Six million sheep are grazing upon its thousand hills, which would furnish raw

material for a large number of woollen mills. The land is favorable for the culture of the sugar beet, and manufactories for this product are needed. A local authority states that "the rubber plant is indigenous and mineral products are of such extent and variety that industries that need them for raw material, or incidentally in the process of manufacture, will find in this part of the United States a location much more favorable than most of the Eastern manufacturing centres. There exist large deposits of iron ore, fluxing material and fuel for furnaces, steel mills and smelters, and there are but few branches of manufacture which could not be established with profit in this part of the Southwest. Besides the raw material there are offered the water-power, the fuel, the cheap labor, special inducements, such as exemption from taxation for the first five years and a low assessment thereafter, favorable legislation, cheap building sites, railroad facilities, freedom from excessive competition, the increasing home demand of a growing commonwealth of vast resources, and proximity to the markets of Mexico and the Orient. . . .

"Farmers are urged to come to till the fertile soil under the most favorable conditions, and with home markets that pay better prices than can be obtained anywhere else. Only a quarter of a million of acres are under cultivation, and most of these only in forage plants or in products that demand little attention; four times that

area is immediately available for agricultural purposes. Not one-half of the flowing water is utilized, and not one-fiftieth of the flood water is stored. There are undeveloped possibilities of farming by the Campbell or dry-soil method. New Mexico raises the finest fruit in the world, and every other crop that can be produced anywhere in the temperate zone. Yet it imports annually millions of dollars' worth of flour, alfalfa, hay, potatoes, fruit, garden produce, poultry, eggs, butter, cheese, honey, beef, pork, and other products of the farm and dairy that it can and should raise at home. Free lands, the finest climate in the world, irrigation, churches, schools, railroad facilities, home markets, good prices, and extensive range, are all factors which help to make the life of the farmer and stock grower in New Mexico pleasant and prosperous."

The visitor from the East enters New Mexico through a long tunnel; and in Raton, a prosperous city of some eight thousand people located in the Raton Mountains, is found the centre of an enormous coal belt, and also a promising oil field. Raton is called the "Gate City." It exports ice of a very pure quality, the water being from a reservoir of a capacity of over fifty million gallons. The streets of Raton are graded and have electric lighting; there is a fine park, long-distance telephonic connection with Colorado and New Mexican cities, and its schools and churches are numerous. A new Raton tunnel is now

in process of construction by the Santa Fé line that will enter New Mexico through the mountains at a lower point. The work is being done by electric drills that offer a most interesting spectacle in their process. The tunnel will cost a million dollars. Most beautiful is the landscape and the coloring of air and sky between Raton and Las Vegas. The Cimarron range is silhouetted against the western sky; picturesque points on the old Santa Fé trail are seen; and Mora Cañon, through which the journey lies, has its romantic attractions. From the lofty plateau of Raton's Peak the deep, dark valley of Rio Las Animas Perdidas is disclosed; the matchless Spanish Peaks, "Las Cumbres Españolas," lift their heads into the blue sky; Pike's Peak gleams like a monumental shaft in the clouds, and the Snowy Range, for more than two hundred miles, is within the luminous landscape.

Las Vegas, the second city in importance in New Mexico, is a fascinating place. There are really three towns of Las Vegas — the old Spanish town, still retaining its ancient convent and missions; the new, up-to-date Las Vegas, with its Castañeda Hotel — beautiful in the old Moorish architecture, with spacious piazzas and balconies; and Las Vegas Hot Springs, connected by trolley cars. Thus there is the particular paradise of the invalid, or of those who take prevention rather than cure and a sunny winter in order not to be invalids; for at Las Vegas Hot Springs, to which a branch railroad of this omnipresent

Santa Fé conveys the traveller — only six miles — the Hot Springs boil and bubble like the witches' caldron. Here the guests may immerse themselves in boiling mineral water, or lie all day in the sunshine, or whatever else they prefer; and the medicinal waters, internally and externally administered, are said to make one over altogether. Rheumatic and tubercular affections flee, it is said, before this treatment and the wonderful air; and apparently if Ponce de Leon had only chanced upon Las Vegas he would not have searched in vain for his fabled fountain.

Albuquerque is an exceedingly "smart" town. Its residents are almost entirely Eastern capitalists, who are living here that they may keep an eye on their possessions, mines, ranches, and the things of this world in general. However largely they have laid up their treasures in heaven, they have a goodly amount also on earth, over which they perhaps keep closer watch and ward than over their more immaterial possessions. At all events, Albuquerque is a sort of Newport of the West, where people drive and dance and dine from one week to another, and the women are so stylish as to suggest some occult affinities with the Rue de la Paix.

In this brilliant and thoroughly up-to-date young city of Albuquerque, the metropolis of New Mexico; in Las Vegas, one of the fascinating towns of the continent; in Raton and Gallup, and in its capital, Santa Fé,

the territory has a galaxy of exceedingly interesting towns.

Albuquerque is the trade centre of a region exceeding in area all New England. With a population estimated at some eighteen thousand; the seat of the University of New Mexico, whose buildings occupy a plateau two hundred feet above the town, commanding a beautiful view; with a scenic background of the Sandia and the Jemez mountains; with the most extensive free Public Library in the territory; two daily journals and a number of weekly papers in both Spanish and English, and several monthly publications; with its splendid railway facilities both to the North and the South, as well as on the great trans-continental line from the East to the Pacific; with the shops of the Santa Fé road employing over seven hundred men, as the junction point of three lines of this superb system; and with the beautiful Alvarado hotel, in the old Spanish mission architecture, from whose wide piazzas the view comprises a host of mountain peaks piercing the turquoise sky, and whose beauty and comfort is a masterpiece of the magician of the Land of Enchantment; with the Musée of Indian relics and souvenirs of the Moki, the Navajo, the Zuñi, Pima, and Apache; the fine Mexican filigree work; the model of an Indian pueblo, and other curios, — with all these and many other interesting aspects, Albuquerque fascinates the tourist. In the "Commercial Club" it has a unique

institution representing the combination of business and social life. The broad streets are well lighted by electricity; there is electric transit and a fine water system. Albuquerque has also extensive manufacturing interests, in foundry, lumber, and other directions, which aggregate an investment of over two millions of capital with an annual productive value of more than four millions.

Returning to Las Vegas; with its ten thousand inhabitants, its large floating population drawn by the medicinal hot springs, and the seat of the territorial Normal School. As a noted wool centre, and with its daily papers, good schools, and many churches, it is another alluring point. One feature of important interest is the new "Scenic Highway" that is in process of completion between Las Vegas and Santa Fé, across the Pecos Forest Reserve, which will offer some of the grandest views in any of the mountain regions of the West. It will be to Santa Fé and Las Vegas what the beautiful drive between Naples, Sorrento, and Amalfi is to Southern Italy. This scenic road will wind up to the Dalton Divide, nine thousand five hundred feet high, where Lake Peak, glittering with snow, Santa Fé Cañon, and other peaks and precipices and cañons, are all about, and the Pecos River is seen far below as a thread of silver. This drive will be one of the famous features of the entire West when completed. New Mexico monopolizes the greatest belt of coal deposits west of the Missouri, while Arizona has the monopoly in pine forests.

The reclamation work in the southern part of the Rio Grande Valley is now in successful process, and near Engle a reservoir forty miles in length will be established, having a capacity of two million acre-feet. It is estimated that a hundred and ten thousand acres of land will thus be put under irrigated agriculture which will yield marvellous returns in alfalfa, cereals, vegetables, and fruits.

The government has also purchased the system of the Pecos Irrigation Company, which is now transferred to the Reclamation Service of the United States. This is the largest irrigation scheme in New Mexico. It is located on the Pecos River, which is fed from springs many of which gush forth from the earth with such force as to indicate that their source must be in high, snow-crowned hills.

New Mexico's railroad facilities may be estimated from the fact that not a county in the territory is without a railroad, while many have the benefit of three lines. With twenty-five hundred miles of railroads within the territorial limits already in operation, it is confidently expected that this number will be increased to four thousand miles within two years, as much of this anticipated increase is already under construction. Of the present railways eleven hundred miles belong to the Santa Fé system alone. The matchless scenery of the Denver and Rio Grande route between Ontonito and Santa Fé offers the tourist one of

the most enjoyable of trips through Española, Caliente, and other points of beauty with the mountain peaks of San Antonio, Taos, Ute, and others within the horizon, often appearing like islands swimming in a faint blue haze.

There is space and to spare in New Mexico. There are almost unlimited possibilities, with much to get and as much to give, and the latter is by no means less important in life than the former. Out of a total area of over seventy-eight million acres only about a quarter of a million are under irrigation agriculture, and the field for reclamation is as unlimited as it is promising. The land is fertile and the productions are abundant. The sky is a dream of color and of luminous beauty, and the climate is one of the most delightful in the entire world. Nor does New Mexico suffer from that which is the greatest deprivation of Arizona, — the lack of water. There is an abundance of the mountain flood waters that now go to waste which would store vast reservoirs; there is the flow of copious streams and large river systems, and there are artesian belts of water all ready for mechanical appliances. The Campbell dry culture, which is increasingly in use in the eastern part of Colorado, has been successfully introduced into New Mexico. Fruit-growing is already becoming an important industry, and the apple orchard, of all other varieties of horticulture, is the most successful. At the Paris Exposition in 1900 New Mexico made an exhibit

of apples, and also at Buffalo in 1901, receiving from the former the award to rank with those of the best apple-growing regions in any part of the United States, and from the latter the first prize. Peaches, pears, and apricots grow well; the cherry does not thrive in New Mexico, but grapes are grown with conspicuous success.

The mineral resources of New Mexico are varied, and include gold, silver, copper, lead, and other minerals. In precious stones there is promise of untold development. The Tiffanys own large turquoise mines, whose supply, thus far, has proved inexhaustible; and the opal and the moonstone are found in many places. But it is as an agricultural commonwealth, and as the repository of vast coal belts, that New Mexico is chiefly distinguished.

It was early in February, 1880, that the first train over the Santa Fé railroad entered the territorial capital and initiated its transformation from the mediæval Spanish town to that which is, in part, the theatre of the progressive American life. In Santa Fé one of the landmarks pointed out to-day to the visitor is the old Santa Fé Trail, whose story was told so vividly, some years ago, by Colonel Henry Inman,[1] who has described the majestic solitude of this highway and has narrated the mingled experiences of the early pioneers and the soldiers who thus

[1] The Old Santa Fé Trail: The Story of a Great Highway, 1897. The Macmillan Company.

marched through the wilderness. History and romance mingle in the wonderful past of New Mexico, and it needs no sibyl of old to proclaim from the *Mesa Encantada* the promise of the future to this beautiful Land of the Turquoise Sky.

CHAPTER VII

THE STORY OF SANTA FÉ

"From scheme and creed the light goes out,
The saintly fact survives,
The Blessed Master none can doubt
Revealed in holy lives."

"Oh, more than sacred relic, more
Than solemn rite or sacred lore,
The holy life of one who trod
The footmarks of the Christ of God."

In the place once occupied by those whose lives were consecrated to the divine ideal, some influence, as potent as it is unseen, binds the soul to maintain the honor that they left; to hold the same noble standard of life. The spell is felt even while it eludes analysis. Few to-day can tread the narrow, primitive little streets of old Santa Fé without some consciousness of this mystic influence. It was here, in the centuries gone from all save memory, that

"there trod
The whitest of the saints of God,"

and "The True City of the Holy Faith of Saint Francis" (*La Ciudad Real de la Santa Fé de San Francisco*) is forever consecrated by the memory of these holy men, and vital with the tragic interest, the heroic and pathetic story

of their lives. As early as 1539 Friar Marcos de Nizza and other Fathers of the Church pressed on into this country — then an unknown wilderness — to extend the domain of the Holy Cross and carry onward "the true faith of St. Francis." They encountered every hardship possible to a savage land; sacrifice and martyrdom were their reward. They left a land of learning and refinement to carry the light into regions of barbarism. They gave their lives to teaching and prayer, and they sowed without reaping their harvest. Yet who shall dare think of their brilliant, consecrated lives as wasted? for the lesson they taught of absolute faith in God is the most important in life. Faith provides the atmosphere through which alone the divine aid can be manifested, and the divine aid is sent through and by means of our friends and helpers and counsellors in the unseen world. It is man's business, his chief business, now and here, to co-operate with God in the carrying out of His plans and purposes. It was this literal and practical faith in divine aid that the Franciscan Fathers taught in the wilderness through all hardship and disaster.

"Say not the struggle naught availeth."

It must always avail.

"Yet do thy work; it shall succeed
In thine or in another's day,
And if denied the victor's meed
Thou shalt not lack the toiler's pay."

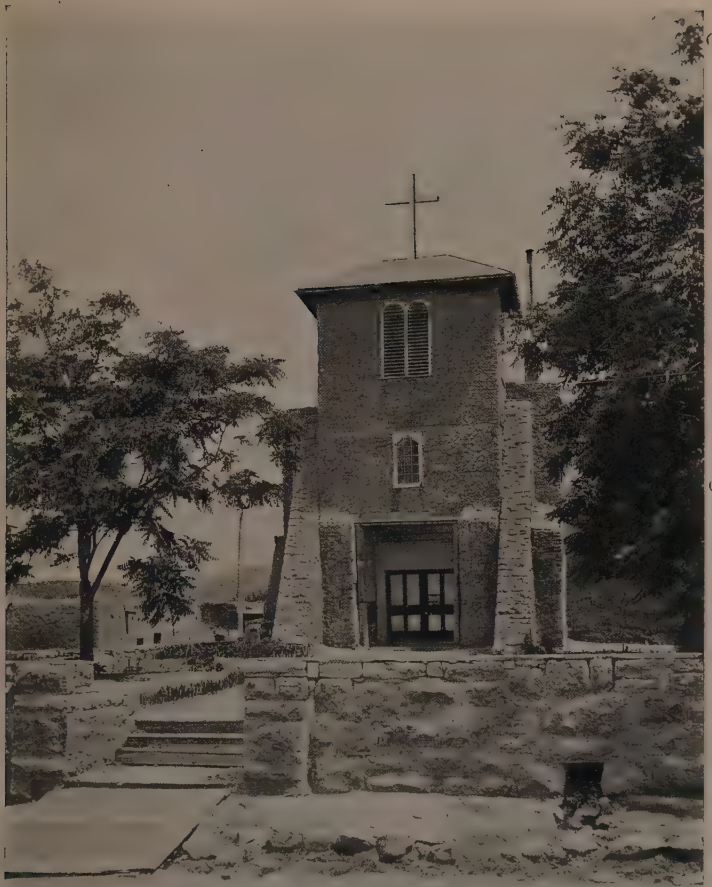
This Spanish mission work planted itself over the entire vast region which is now known as New Mexico, Arizona, and Southern California. The friars set out on long, lonely journeys, wholly without ways and means to reach a given destination save as they were guided by unseen hands and companioned by unseen guides. The cloud by day and the pillar of fire by night led them on. They went forth to meet desolation and sacrifice and often martyrdom; yet their gentle zeal and cheerful courage never failed. They traversed hundreds of miles of desert wastes; they encountered the cruel treatment of the Apaches and the Navajos; but these experiences were simply to them the incidents of the hour, and had no relation to the ultimate issue of their work. In 1598 the first church was founded, by a band of ten missionaries who accompanied Juan de Oñate, the colonizer, and was called the chapel of San Gabriel de los Españoles, but it was deserted when, in 1605, the city of Santa Fé was founded by Oñate, and in 1630 the church of San Miguel was built. The original wall was partly destroyed in the rebellion of a half-century later, but it was restored in 1710, and the new cathedral was built on the site where the present one now stands. As early as 1617 there were eleven Spanish mission churches within the limits of what is now New Mexico, — at Pecos, Jemez, and Taos; at Santa Clara, San Felipe, and other places, mostly within the valley of the Rio Grande. In six of the historic "seven cities of Cibola," all Zuñi

towns, these missions were established; and in the ancient pueblo of San Antonio de Senecú, Antonio de Arteaga founded a church in 1629; in Picuries, in 1632, Friar Ascencion de Zárate established the mission, and in 1635 one also in Isleta. In passing Glorieta, from the train windows, to-day, can be seen the ruins of the early mission church established there. Before the close of the seventeenth century the churches in Acoma, Alameda, Santa Cruz, Cuaray, and Tabirá had been founded, the ruins of all of which are still standing. These Franciscan Fathers penetrated the desert and made their habitations in solitary wastes so desolate that no colonizers would follow; but to the Indians they preached and taught them the elements of civilized life.

"Not the wildest conceptions of the mission founders could have foreseen the results of their California enterprises," says Professor George Wharton James in his interesting work on these old missions.[1] "To see the land they found in the possession of thousands of savages converted in one short century, to the home of tens of thousands of happy, contented people, would have been a wild vision indeed. God surely does work mysteriously, marvellously, His wonders to perform."

Santa Fé is the centre of the archdiocese whose other diocesean cities are Denver and Tucson. The archbishop, the Most Reverend J. B. Salpointe, D.D., whose presence

[1] In and Out of the Old Missions of California, by George Wharton James. Little, Brown, & Co., Boston, 1905.



SAN MIGUEL CHURCH, SANTA FÉ

exalts the city of his residence, is one who follows reverently in the footsteps of Him whose kingdom on earth the early Franciscans labored to establish.

In 1708 San Miguel was restored by Governor José Chacon Medina Salazar y Villaseñor, Marqués de Peñuela, and two years later these restorations were completed. An inscription that can be traced to-day on the gallery bears this legend:

El Señor Marqués de la Peñuela Hizo Esta Fábrica: El Alférez real Don Augustin Flores Vergara su criado. Año de 1710.

Not only is this "City of the Holy Faith" consecrated by that sacrificial devotion of the Franciscan Fathers; the heroic explorers and pioneers, the brave and dauntless soldiers, from the time of Cabeza de Vaca and Coronado to that of the gallant and noble General Kearny, have left on Santa Fé the impress of their brave purpose and high endeavor. The old Cathedral of San Francisco, the ancient church of San Miguel, and the Rosario Chapel, all interest the stranger. In 1692 Diego de Vargas marched up from the south with two hundred men and looked sadly at the little town of Santa Fé, from which his countrymen had been driven. It would seem that de Vargas was a romantic figure of his time. He was evidently endowed with the characteristic vehemence of temperament, intense energy, and the genius for effective action that marked the Spanish pioneers. He was rich in resources and

manifested a power of swift decision regarding all the perplexities into which his adventurous life led, ever beckoning him on. The little town he had entered appealed to him in its impressive beauty. Surrounded with majestic mountains, with their deep and mysterious cañons, it was then, as now, a region of entrancing sublimity.

Adjoining San Miguel is the old house where Coronado is said to have lodged in 1540. The "Old Palace," always used by the Governors of New Mexico, is partly given over to a museum of Indian and Mexican curiosities. There is a little library, open only every other afternoon; there are many mountain peaks around, which are not difficult to climb, and which offer charming views. The new State House is a fine modern building, and Governor Hagerman, formerly an attaché of the American Embassy at St. Petersburg, is alert and progressive in his methods.

More than half the residents of Santa Fé speak no English, and these Spanish and Mexican residents have their papers in their own language, their separate schools, and their worship in the old Cathedral. In the early afternoon women in black, with black mantillas over their heads, are seen passing up San Francisco Street and entering the Cathedral, where they fall on their knees and tell their beads in the silent church. Often one may see in the streets a funeral procession. The casket is carried in a cart, and the family sit around it, on the bottom of the wagon. A few friends follow on foot, and thus the pathetic and grotesque little procession winds on its way.

The history lying in the dim background of this ancient Spanish city is one that impresses the imagination. It is a part of all that wonderful early exploration by the Spanish pioneers of the vast region of country that is now known as Arizona and New Mexico.

In 1538 Cabeza de Vaca, after following the disastrous expedition of Pánfilo de Narvaez to Florida, set forth with four men to penetrate the vast unknown wastes to the west, and without compass or provisions they made their way, crossing the Mississippi two years before its discovery by De Soto, reached the Moqui country, and finally arrived in Sinolao with glowing tales that excited the enterprise of the Spanish conquerors and led to the founding of another expedition authorized by the viceroy, Mendoza. It fared forth under the leadership of Padre Marcos de Nizza, who (in 1539) entered the country of the Pimas, passed up the valley of the Santa Ana, and set up the cross, giving the country the name of the New Kingdom of San Francisco.

Padre de Nizza's men were all massacred by the Moquis, but he returned, as if bearing a charmed life, and set all New Spain aflame with his tales of gold and of glory, and the great opportunity to extend the work of the Holy Cross.

Mendoza then proceeded to organize two other expeditions, one under the intrepid Vasquez de Coronado and the other under Fernando Alarçon. Coronado visited the

ruins of Casa Grande and at last reached the "Seven Cities," but their fabled wealth had shrunk to the sordid actualities of insignificant huts, and Coronado returned to New Spain in 1542, disappointed and dejected.

In the meantime the expedition of Alarçon had sailed up the Gulf of California (then known as the Sea of Cortez), and he discovered the Colorado and the Gila rivers, ascending the Colorado in boats up to the foot of the Grand Cañon. Then for nearly half a century no further efforts to explore this region were made. But it is interesting to note that some eighty years before the landing of the Pilgrims a Spanish expedition had penetrated into the country which is now Arizona, and have left definite record of their discoveries.

In 1582 Antonio de Espejio explored the pueblos of the Zuñi and Moqui tribes, visiting seventy-four in all, and discovering a mountain rich in silver ore. From this time New Mexico was under the rule of the Spanish conquerors.

Juan de Oñate, who married Isabel, a daughter of Cortez and a great-granddaughter of Montezuma, assumed the leadership, and about 1605 the town of Santa Fé was founded, and within the succeeding decade the Mission Fathers had built a dozen churches and their converts composed over fourteen thousand. A prominent padre in this movement was Eusebio Francisco Kino.

Santa Fé has the distinction of being the oldest town in

"WATCH TOWER." CLIFF DWELLERS, NEW MEXICO

CLIFF DWELLERS. WITHIN TWENTY-FIVE MILES OF SANTA FÉ, NEW MEXICO

the United States, having been established fifteen years before the landing of the Pilgrims.

The mission church of San Xavier del Bac was established at so early a date that it was in ruins in 1768, and on its site was built the present one, in the valley of Santa Cruz, some ten miles south of Tuscon. This mission is a rare mingling of Ionic and Byzantine architecture, with a dome, two minarets, and castellated exterior. The front bears the coat-of-arms of the Franciscan monks — a cross with a coil of rope and two arms below — one of Cohant and the other of St. Francis d'Assisi. There are four fresco paintings, and there are more than fifty pieces of sculpture around the high altar.

The missions of Guevara, Zumacacori, and San Xavier were peculiarly fruitful in good results. The ruins of Zumacacori still cover a large space. The church is partially unroofed; the form is seen to have been that of a plain Greek cross with a basilica, and a roofless chapel is standing. The basilica is still crowned by the cross, and the vital influence of this sign and seal of faith in the Christ, this commemoration of the sacrificial zeal that animated the Mission Fathers is still felt by all who gaze upon this sacred emblem silhouetted against a blue sky.

Santa Fé is, indeed, alive with the most profound and arresting interest. The work of the early Spanish missionary priests effected a great work among the Indians in creating conditions of peace and industry; for faith in

God, taught in any form, is not merely nor even mostly an attitude of spirit: it is the instinctive action of life. It permeates every motive inspiring it with power; it vitalizes every effort with creative energy. Faith in God may well be described as the highest possible form of potency. He who is receptive to the Divine Spirit moves onward like a ship whose sails are set to the favoring winds. He who is unreceptive to the Divine Spirit is like the ship before the wind with all her sails furled. "The merit of power for moral victory on the earth," said Phillips Brooks, "is not man and is not God. It is God and man, not two, but one, not meeting accidentally, not running together in emergencies only to separate again when the emergency is over; it is God and man belonging essentially together, — God filling man, man opening his life by faith to be a part of God's, as the gulf opens itself and is part of the great ocean."

The unfaltering devotion of the Franciscan Fathers to the work of bringing civilization and Christianity to these Indian pueblos and their martyrdom in their efforts to establish "the true faith of St. Francis" invests Santa Fé with an atmosphere of holy tradition.

> "All souls that struggle and aspire,
> All hearts of prayer by Thee are lit;
> And, dim or clear, Thy tongues of fire
> On dusky tribes and twilight centuries sit."

These early Church Fathers taught a pure and high order of faith in the most practical way. They acquired

the Indian language in sufficient measure to speak to the tribes. They taught them the rudiments of arithmetic, history, and geography — in the imperfect way then known ; but they gave their best. They inculcated industry and honesty. Their faith is largely told in the poet's words, —

> "That to be saved is only this :
> Salvation from our selfishness."

The missions through all the Southwest were peculiarly fruitful in good results. The ruins of many still exist, revealing them to have usually been in the general design of a nave and basilica crowned by the cross — this sign and seal of faith in the Christ.

> "O Love Divine ! whose constant beam
> Shines on the eyes that will not see,
> And waits to bless us ; while we dream
> Thou leavest, because we turn from Thee !
>
> . . . . .
>
> "Nor bounds, nor clime, nor creed thou know'st :
> Wide as our need Thy favors fall ;
> The white wings of the Holy Ghost,
> Brood, seen or unseen, o'er the heads of all."

Three Spanish documents still exist in the territorial records of New Mexico dated 1693–1694, which give a full account of the Spanish conquest ; of the re-conquest by the Indians, and the final conquest again by the Spaniards. There is ample evidence that a city existed on the present site of Santa Fé four hundred years before the settlement at St. Augustine. The final Spanish conquest took place

in 1692, but all the records prior to 1680 were unfortunately destroyed in the Pueblo Rebellion. New Mexico's historian, Hon. L. Bradford Prince, who has more than once served as Governor of the territory and who is one of the most distinguished men of the West, has finely said that the people of his territory, although threefold in origin and language (Spanish, Mexican, and American), are one in nationality, purpose, and destiny. In Governor Prince's history of New Mexico he notes its three determining epochs, — the Pueblo, the Spanish, and the American, — and he refers to it as "an isolated, unique civilization in the midst of encircling deserts and nomadic tribes."

On August 18, 1846, General Stephen W. Kearny took possession of the capital of New Mexico in the name of the United States; and on that date, for the first time, the national colors floated from the Old Palace and the acting Spanish Governor, Don Juan Baptista Vigil y Alvarid resigned his authority.

On the historic plaza where now a memorial to this brave officer stands, placed there by the "Daughters of the Revoluton," General Kearny proclaimed the peaceful annexation of the territory of the United States.

"We come as friends to make you a part of the representative government," he said. "In our government all men are equal. Every man has a right to serve God according to his conscience and his heart."

General Kearny assured the people of the protection of every civil and religious right, and this forcible and noble speech — so characteristically representing the generous and noble spirit of one of the ablest among the leaders and the heroes of the nineteenth century — made a profound impression on the minds of all who listened to the words. When on August 18 of 1946 New Mexico shall celebrate her centenary of union with the United States, this memorable address of General Kearny's should be read to the assembled populace. Not even Lincoln's noble speech at Gettysburg exceeds in simple eloquence and magnanimity the lofty words of General Kearny. They were worthy to be spoken in "The City of the Holy Faith."

It was thus that New Mexico entered the United States, *Esto Perpetua.* To-day, after a territorial novitiate of more than sixty years, she is ardently urging her claim for statehood.

In old Santa Fé the past and the present meet. Governor Hagerman receives his guests in the same room in the Old Palace that was used by the first viceroy; and seventy-six Spanish and Mexican and eighteen American rulers have preceded him, among whom was General Lew. Wallace, who, while serving as territorial Governor, wrote his immortal "Ben Hur" in one room of the palace, which is still pointed out to the visitor. During this period Mrs. Wallace wrote many interesting articles on

the history, the life, and the resources of the territory, in which are embalmed valuable information delightfully recorded. Mrs. Prince, the wife of ex-Governor Prince, a lady distinguished throughout all the country for her gracious sweetness and refined dignity of manner, is much interested in the New Mexico Historical Association; and the ex-Governor and Mrs. Prince, His Honor, Mayor Cotrell, and Mrs. Cotrell, Colonel and Mrs. Max Frost, and others of the choice society of Santa Fé, are preserving the history of this territory "that has survived all those strange modulations by which a Spanish province has become a territory of the Union bordering on statehood." Santa Fé is the home of some of the ablest lawyers in the United States, and one private law library is said to be the largest legal library west of Chicago.

The Old Palace has been identified with the times of the Inquisition; with the zealous work of Friar Marcos de Nizza, Friar Augustino Ruiz, and with Coronado and his band of warriors. On the Plaza, Juan de Oñate unfurled the banner of Spain; here de Vargas gave thanks for his victory, and here to-day is a simple monumental memorial of General Kearny placed there by the Daughters of the Revolution. The revered memory of Archbishop Lamy is closely associated with the place. In the Old Palace is a musée where a great array of unique curios is gathered; pictures of saints rudely painted on skins; crucifixes

rudely carved in wood or moulded in native silver; gods carved in stone, and primitive domestic utensils.

There is a very charming and cultivated society in Santa Fé of the small circle of American residents, — a circle that is of late rapidly increasing. The country around is rich in gems, — the turquoise, opal, onyx, garnet, and bloodstone being found in liberal deposits; and in the town is a manufactory of Mexican filigree work that employs the natives only who are very skilful in this delicate art. The Plaza is a curiously fascinating place to saunter around, and the visitor finds himself loitering and lingering as he is wont to loiter and linger on the old Ponte Vecchio in Florence. The nomenclature of Santa Fé is sufficiently foreign to enable one to fancy himself in Andalusia, as such names as Padilla, Quintona, Lopez, Gutierrez, Vaca, and others recur.

The Rosario Chapel, built by Señor Diego de Vargas, stands on a height overlooking Santa Fé a mile distant from the Plaza and the Old Palace. Near it is now located the Ramona School for the children of the Apaches. The legend of the founding of San Rosario is still on the air. When, in 1692, Señor de Vargas, marching from the south with his band of two hundred men, gazed upon the city from which, in 1680, his compatriots had been so tragically driven, he prostrated himself on the ground and implored in prayer the protection and aid of "Our Lady of the Rosary," and recorded his purpose

that, would she but lead him on to victory, he would build, on the very site where he was kneeling, a chapel to her name. Arising, he led his band on to assault, and after a tragic struggle of eleven hours' duration he was victorious. Did the "Lady of the Rosary" shield and strengthen him? Who shall venture to deny it?

> "More things are wrought by prayer
> Than this world dreams of."

De Vargas had promised that, in case the victory was granted to him, he would have the statue of the Virgin carried from the cathedral to the Rosario Chapel, as already noted. To this day the custom is fulfilled; and each year, on the Sunday following *Corpus Christi*, this sacred drama is enacted, with sometimes two thousand people, drawn from all the country around, forming the procession. The statue is kept in the chapel a week, with solemn masses celebrated every morning, after which it is returned to the cathedral and the chapel is closed, not to be opened again until the octave of the Feast of *Corpus Christi* the next year.

The "City of the Holy Faith" is very quiet in these days, and one finds little trace of the turbulent past when it was the storm centre of tragic wars and revolutions. The incessant warfare between the Spaniards and the Indians, the sublime courage and devotion of Bishop Lamy and other Fathers of the Church, constitute a wonderful chapter in the history of our country.

Santa Fé antedates the landing of the Pilgrims by more than twenty years. Its history is an unbroken record of thrilling and romantic events, from its capture by the Pueblos in 1680; the terrible massacre of the Mission Fathers, and the flight of the Governor to El Paso; its conquest again by de Vargas in 1692; the change from Spanish to Mexican rule; then the splendid entrance of General Kearny and his troops (in the summer of 1846) in the name of the United States, down to the scenes and the incidents of the old Santa Fé Trail and thence to the present day, when three railroads have brought the city into close touch with the modern life of which it still refuses to become a part. Still, Santa Fé has nine mails a day, a free-delivery postal system, electric lights, and local and long-distance telephonic connection. The Capitol, where Governor Hagerman presides over the councils of state, is a fine modern building with a beautiful view from the dome. There is a new Federal Building of stone in classic design, in front of which is placed a monument to Kit Carson. St. Michael's College, the residence of the Archbishop, and the Government Indian School attract the eye. But it is the old Santa Fé of haunting historic memories that one dreams of in the narrow streets, or in looking down on the town from a mountain-side. The quaint little Plaza dreams in the sunshine, which lingers, as if with a *Benedicite*, on the Kearny memorial, while through the unshuttered and uncurtained windows of the

Old Palace, forming one side of the Plaza, the antique débris may be dimly seen. Should the ghost of any of the old Spanish warriors peer forth, the apparition would hardly produce a ripple of surprise. The long colonnade may be the favorite promenade of phantoms for aught one knows, — phantoms, that come and go, —

"With feet that make no sound upon the floor."

The twentieth-century sunshine lights up the dusky corners wherein are stored the relics of the Spanish conquerors and the followers of St. Francis. Perchance Francis d'Assisi himself, "revisiting the glimpses of the moon," glides along the shadows, drawn to the spot where, at so fearful a cost of life and treasure, his "holy faith" was guarded; or it may be the warrior in his armor who for an instant is dimly discerned through the dust-covered windows. Coronado, too, may haunt this scene. Many are those in the historic ranks who have contributed to the making of Santa Fé. It is the most composite city in American history. The very air is vocal with tradition and legend.

The little shops around the Plaza bear their signs mostly in Spanish. Yet mingling with these is the office of Mr. Lutz of the Santa Fé transcontinental line, with which the New Mexican capital is connected by a branch to Lamy, on the main line, where one may stand and converse with Denver, — a feat which may surprise the

ghost of Coronado or of Juan de Oñate were it looking on; and Colonel Frost's daily journal, with its news of the world, is just at the corner. Not far away, too, is Mr. Linney, who represents the United States Signal Service, and regards Santa Fé as a most opportune town in which to pursue his most up-to-date study of atmospheric phenomena.

A remarkable personality in Santa Fé is Colonel Max Frost, the editor of "The New Mexican," the political leader of the Republican party and a man who, though blind and paralyzed, is simply a living encyclopædia of historic and contemporary events. At eight o'clock every morning Colonel Frost is in his office, at his desk, dictating to three expert stenographers, carrying on three different subjects simultaneously. Instead of his blindness being a hindrance to his work, he has, by the sheer force of his remarkable energy, transformed the obstacle into a stepping-stone. "I can do more work in ten minutes than most men can in an hour," he said, in reply to a question, "as, being blind, I have nothing to distract my attention. I put my mind on my work and keep it there."

Colonel Frost's experience is the most convincing testimony to the phenomenal power that lies in mental concentration. He cannot move without assistance,—physically he is a wreck; yet he dictates columns of work daily; he is the most influential leader of the political

party, and he is one of the makers of New Mexico. Every line of copy in his daily paper is read to him before it goes to press, and the vigorous and brilliant editorial page is largely his own work. For four hours, every evening, Mrs. Frost reads to him from the great Eastern dailies, the periodicals, and new books. It is said in New Mexico that Colonel Frost has been the power behind the throne in territorial legislation since the time that General Lew. Wallace served as chief executive in 1879.

Colonel Frost went to Santa Fé from Washington in 1876 as a brilliant young officer, commissioned to build a military telegraph line from Santa Fé to Phœnix, Arizona, — a distance of five hundred miles. This commission attracted great attention, and Colonel Frost became at once a power among the Spanish-American citizens of the territory. His great ability was widely recognized by leading men all over the Southwest. He was urged to remain and become a citizen of Santa Fé. As if to further prepare him for his remarkable life, he was commissioned by the government to serve at several points in New Mexico on a variety of important matters, and he thus became singularly identified with the general progress of the country.

With all his extraordinary work in conducting his paper and devoting himself to party political measures, Colonel Frost is serving his territory as Secretary of the Bureau

of Immigration with the most conspicuous ability. Under his electric touch and irresistible energy there is constantly prepared and sent out some of the finest transcriptions of the entire status of the country, in climate, resources, and opportunities; in achievements already realized and in the potential developments of the future. Thousands of residents have been drawn to New Mexico through the data so ably set forth by Colonel Frost, the matter being, each year, revised to date. He knows, from personal observation and intimate contact, every part of the territory; he is personally acquainted with all the leading people; and no visitor in the territory can feel his trip in any sense complete without meeting Colonel Max Frost. If every state and territory in the Far West could command such efficient service in the literature of immigration as is rendered by Colonel Frost, there would be an appreciable increase of their settlers.

There are many eminent men in Santa Fé, — government officers, political leaders, gifted lawyers, — whom the stranger within the gates must recognize as among the ablest leaders and makers of the nation. A newspaper recently established, "The Eagle," ably edited by Mr. A. J. Loomis, adds another attraction and source of inspiration to the wonderful old city, whose life still continues to illustrate and exalt the "Holy Faith of St. Francis."

CHAPTER VIII

MAGIC AND MYSTERY OF ARIZONA

". . . The stars are glowing wheels,
Giddy with motion Nature reels;
Sun, moon, man, undulate and stream,
The mountains flow, the solids seem,
Change acts, reacts; back, forward hurled,
And pause were palsy to the world. —
The morn is come: the starry crowds
Are hid behind the thrice-piled clouds;
The new day lowers, and equal odds
Have changed not less the guest of gods."

EMERSON

ARIZONA is the Land of Magic and of Mystery. It is the land of the yet undreamed-of future, and it is also the region of brooding mystery, of strange surprise. Besides its stupendous Grand Cañon, here are the cañons of Chiquito, Marble, Desolation, and Limestone; the Montezuma Well, Castle Dome, the Four Peaks — rising to the height of several thousand feet, for hundreds of miles; the Thumb Buttes, San Francisco Peak, the Tonto Basin, and the Twin Lake — all of these phenomenal marvels of scenery telling their tale of the action of water and of fire thousands of ages ago; convulsions of nature which have rent the

PETRIFIED GIANTS, THIRD FOREST, ARIZONA

mountains asunder, opened chasms thousands of feet deep in the earth, and projected the bottom of a sea into the air as a mountain peak, —

"What time the gods kept carnival."

The gods have, indeed, kept high carnival in Arizona. Every aspect of nature is on a scale of Titanic magnificence. The cañon systems of its mountain ranges; the indescribable grandeur which reaches its supreme majesty in the Grand Cañon; the wonders of extinct volcanic action; the colossal channels cut by rushing waters; the unearthly splendor of the atmospheric effects, and the coloring of the skies, — all combine to render Arizona an expression of magical wonder. All manner of phenomenal conditions are encountered. The land is a red sandy desert, whose leading productions are loose stones (lying so thickly in the sand as to make walking or driving all but impossible) and pine trees, petrified forests, and cacti. The riotous growth of the cactus is, indeed, a terror to the unwary. But it is in sunsets and enchantment of views and richness of mines, and in marvellous curiosities — as the Petrified Forest, Meteorite Mountain, and the Grand Cañon — that Arizona distinguishes herself. She cannot irrigate her soil because there is no available water. But the pine forests — some of them — produce lumber; the mines are rich, and the features of nature unequalled in the entire world; while the exhilaration of the electric

air and the wonderful beauty of coloring quite make up to Arizona resources that are unsurpassed if not unrivalled.

Arizona is not an agricultural country by nature, nor hardly by grace. The resources are mining and timber. Still there are probably some twenty million acres capable of rich productiveness, on which wheat, barley, corn, vegetables of all kinds, and also rice and cotton, could be successfully cultivated if irrigation could be sufficiently effected. The largest area of agricultural land lies in the regions adjacent to Prescott and Phœnix. This Salt River Valley is rich in alluvial soil. The Gila Valley also offers, though in lesser area, the same fertile land, and the valleys of the Colorado, Chiquito, of Pueblo Viejo, the Santa Cruz, the San Pedro, the Sulphur Springs, and the great mesa between Florence and Phœnix, offer the same possibilities. The great problem of Arizona is that of irrigation, as most of the rivers lie at the bottom of inaccessible cañons and present difficulties of access which no engineer can as yet clearly see a way to overcome. The conditions are, however, materially assisted by the rainy seasons, occurring usually in February or March and in July or August, when water can be stored. The rain itself is as peculiar in Arizona as are other conditions of this wonderland. It rains in sections; it may rain in torrents in a man's front yard while the sun shines in his back yard; or if this statement has something of the flavor of "travellers' "

tales, it is at least typical of actual facts. Five minutes' walking is often all that is required to carry one into, or out of, a severe downpour of rain. The clouds follow the mountain spurs as invariably as a needle follows the magnet and a torrent may fall on the mountains above, flashing down in a hundred improvised raging cataracts and waterfalls, while in the valley below the sun shines out of the bluest of skies. No panoramic pictures of the stage ever equalled the pictorial effects of a thunderstorm in the mountains, when the forked lightning leaps from peak to peak in a blaze, through the air; when it dashes like a meteoric shower from rock to crag, and the thunder reverberates with the mighty roar of a thousand oceans beating their surf on the shore.

In Maricopa County, in the Salt River Valley, new and important conditions have been initiated by the government system of irrigation which has transformed arid lands into fertile gardens. The government has expended three million dollars in constructing the Salt River dam (sixty miles north of Phœnix), which is the largest artificial lake in the world. This reservoir will store one and a half million acres-feet of water, drawing it from the mountain cañons miles away. Not only does this project mean an abundant water supply for a region heretofore useless, but rich returns as well.

There are few regions which so attract and reward the researches of the scientist as does Arizona. The geologist,

the mineralogist, the ethnologist, the archæologist, finds here the most amazing field for apparently unending investigation and study. Nor is the botanist excluded. The flora of Arizona offers the same strange and unique developments that characterize the region in so many other directions. The cacti flourish in riotous growth. The saguaro, a giant species, frequently attains a height of forty feet. A strange spectacle it is, with its pale green body, fluted like a Corinthian column, and its colossal arms outstretched, covered with immense prickly thorns and bearing purple blossoms. The century plant flourishes in Arizona. There is a curious scarlet flower, blooming in clusters, at the top of straight pole-like stumps ten to fifteen feet in height, which terminate in luxuriant masses of scarlet blossoms and green leaves, and grow in groups of from a dozen to fifty together, producing the most fascinating color effects in the landscape. This plant is called the ocotilla. There are plants which produce a fibrous textile leaf which the native Mexicans used as paper; there are others whose roots are used as a substitute for soap. The trees are largely pine, cedar, and juniper, though in many parts of the state the rolling foothills bear forests of oak, and the sycamore, ash, elder, walnut, and the swift-growing cottonwood are found along the watercourses.

"The echinocactus, or bisnaga, is also called 'The Well of the Desert,'" says Dr. Joseph A. Munk in some interest-

COLLECTION OF CACTI MADE BY OFFICERS AT FORT McDOWELL, ARIZONA, FOR THIS PICTURE

ing sketches of Arizona.[1] "It has a large barrel-shaped body, which is covered with long spikes that are curved like fishhooks. It is full of sap that is sometimes used to quench thirst. By cutting off the top and scooping out a hollow, the cup-shaped hole soon fills with a sap that is not exactly nectar, but can be drunk in an emergency. Men who have been in danger of perishing from thirst on the desert have sometimes been saved by this unique method of well-digging."

Of the palo verde Dr. Munk notes that it is "a true child of the desert," and he adds:

"No matter how hot and dry the weather, the palo verde is always green and flourishing. At a distance it resembles a weeping willow tree stripped of its leaves. Its numerous long, slender, drooping branches gracefully crisscross and interlace in an intricate figure of filigree work. It has no commercial value, but if it could be successfully transplanted and transported it would make a desirable addition to greenhouse collections in the higher latitudes.

"The romantic mistletoe, that is world-renowned for its magic influence in love affairs, grows to perfection in Southern Arizona. There are several varieties of this parasitic plant that are very unlike in appearance. Each kind partakes more or less of the characteristics of the tree upon which it grows, but all have the glossy leaf and waxen berry."

[1] Arizona Sketches, by Joseph A. Munk, M.D. The Grafton Press, New York.

The grasses of Arizona, are, in some places, very beautiful, of a rich velvety green; and the infinite varieties of wild clover, the gramma, the buffalo, the sacatone, and other grasses, are richly nutritive and offer good facilities for grazing. As a wool-producing country Arizona has no rival, the climate giving the best of protection to sheep with the minimum of care, and the grazing offering adequate means of support; and stock raising of all kinds, indeed, is destined to become a great industry in Southern Arizona.

The climate of Arizona can only be alluded to in the plural, as in the expressive phrase of one of Mr. George W. Cable's creole characters, "dose climates," for Arizona has all the climates of the known world. The range of choice almost exceeds the range of the Fahrenheit registration. From the mountain summit, covered with snow for at least ten months out of the year, to the heat in Yuma, which has scored up to one hundred and twenty-eight degrees or more, there are all varieties and every conceivable quality of atmosphere. In the main, however, the climate of Arizona is inexpressibly delightful.

Dr. Munk, who is one of the distinguished physicians in Los Angeles, has made a study of Arizona as a health resort, and of its conditions he says:

"The atmosphere of Arizona is not only dry, but also very electrical; so much so, indeed, that at times it becomes almost painful. Whenever the experiment is tried, sparks can be produced by friction or the handling of metal, hair, or wool.

It affects animals as well as man, and literally causes 'the hair to stand on end.' The writer has on various occasions seen a string of horses standing close together at a watering-trough, drinking, so full of electricity that their manes and tails were spread out and floated in the air, and the long hairs drawn by magnetic attraction from one animal to the other all down the line in a spontaneous effort to complete a circuit. There are times when the free electricity in the air is so abundant that every object becomes charged with the fluid, and it cannot escape fast enough or find 'a way out' by any adequate conductor. The effect of such an excess of electricity is decidedly unpleasant on the nerves, and causes annoying irritability and nervousness.

"The hot sun sometimes blisters the skin and burns the complexion to a rich nut-brown color, but the air always feels soft and balmy, and usually blows only in gentle zephyrs. The air has a pungent fragrance which is peculiar to the desert, that is the mingled product of a variety of resinous plants. The weather is uniformly pleasant, and the elements are rarely violently disturbed.

"In the older settled sections of our country, whenever there is any sudden or extreme change of either heat or cold, wet or dry, it is always followed by an increase of sickness and death. The aged and invalid, who are sensitive and weak, suffer most, as they feel every change in the weather. There is, perhaps, no place on earth that can boast of a perfect climate, but the country that can show the fewest and mildest extremes approaches nearest to the ideal. The Southwest is exceptionally favored in its climatic conditions."

There is a legend that the poetic, musical name, Arizona, was derived from "Ari," a maiden queen who once ruled the destinies of the Primas, and "Zon," a valley, from the romantic configuration of the state, the two combining into the melodious "Arizona." The tradition is sufficiently romantic to be in keeping with the country it designates, and nothing tends more to simplify the too complex processes of life, not to say history, than to apply the rule of believing those things that appeal to one's sense of the "eternal fitness" and rejecting those which do not. The apostles of the simple life might well include this contribution toward simplicity as an axiom of their faith. At all events, as no other origin of Arizona's pretty name is on record, one may indulge himself in accepting this one with a clear conscience.

The authentic Spanish history of Arizona dates to the exploration of Mendoza in 1540. For nearly three hundred years — until the treaty of Guadaloupe-Hidalgo in 1866, when all the region north of the Gila and Mesilla valleys was incorporated into the area of the United States — the Spanish explorers and the Indian natives were in perpetual conflict, and it was as late as 1863 that Arizona received its name and individual domain as separate from New Mexico, with which it had been incorporated. At the time of the Guadaloupe-Hidalgo treaty Arizona did not contain a single white settlement in the north and west. Near Tucson and Tuba were a few hundred whites, but all

the other portions were the domain of the Apaches and the Moquis. In 1856 the Hon. James Gadsden, then United States Minister to Mexico, negotiated for the purchase of this territory at a price of ten million dollars, and the Mexican colors in Tucson were replaced by the Stars and Stripes. On December 1, 1854, a memorial was presented to the legislature of New Mexico for a separate territorial organization and name of the new acquirement.

Although the Spanish civilization has long since receded into the dim historic past, its spirit is impressed in the very air; its zeal and fervor still, in some mysterious way, permeate the atmosphere.

Until 1863 Arizona remained a portion of New Mexico, the separate territorial government of each being inaugurated at Fort Whipple, near Prescott, — a thriving town of some six thousand people, named for the historian whose works are the unquestionable authority on matters of the Aztec and Spanish civilizations. Prescott is one of the young Western cities that has a great future. Its altitude insures it a delightful climate, the railroad facilities are good, and it is in a region of almost fabulous mineral wealth. The "United Verde" mine, one of the possessions of Senator Clark of Montana, is some thirty-five miles from Prescott and yields vast revenues. Within thirty miles of the town there are very large beds of onyx, one of which covers over one hundred acres. This onyx is found in all colors, — the translucent old gold, green,

red, black, and white, with much in richly varied combinations of color. Prescott has an altitude of a mile above the sea and is a summer resort of itself for Phœnix and other Southern Arizona towns. It is a distance of some three hundred miles from Ash Fork to Winhelman, and Prescott and Phœnix are one hundred miles apart, Prescott being only a hundred miles from Ash Fork and Phœnix about the same distance from Winhelman. Near Prescott there is a curious spot which is not less worthy of world-wide fame than is the "Garden of the Gods" at Colorado Springs; although the "Point of Rocks," as this grotesque system of formation near Prescott is called, is little known to travellers. It is of that same unique sandstone formation that is found in the "Garden of the Gods." Ruskin declared that he could not visit America on the ground that it contained no castles; but had his vision included Colorado and Arizona, with their wonderful sandstone formations, he would have found castles galore so far as scenic effect goes. It is not alone the "Garden of the Gods" and the "Point of Rocks" that are marvellous spectacles, but all over the states, here and there, on foothill and mountain and mesa, these strange, fastastic, colossal rock formations arise, that have all the landscape effect of the castles and towers in Italy.

All the country around Prescott is alluring. On the branch road from Ash Fork of the main transcontinental line to Winhelman some three hundred miles south, there

is an assortment of scenery which might be described as warranted to please every taste. There are lofty mountains pine-clad and green with verdure; others are seen barren and bleak, whose sides and foothills are only decorated with the débris of mines. There are vast desert solitudes where only the misshapen cacti grow, looming up like giant skeletons in the air; and again there are glades carpeted with a profusion of flowers in brilliant hues. There are river-beds (arroyos) without any water and there are streams that go wandering about, in aimless fashion, devoid of regulation river-beds. Some of the arroyos, indeed, have streams running in strong currents, but they hide these streams under the river-bed, as something too valuable perhaps for common view. The clairvoyance of the scientific vision, however, detects this fraud on the part of the arroyo at once, so that of late years it is of little use for any well-regulated river to hide its current under its bed. It may just as well relinquish the attempt and let the stream run in an honest Eastern fashion, like the Connecticut River, for instance, which is staid and steady, like its state, and never undertakes to play pranks with its current. Since the scientist has fixed his glittering eye on Colorado and Arizona, all the gnomes and nixies have the time of their life to elude this vigilance, and they seldom succeed. The scientist relentlessly harnesses them to his use; and though a river may think to conceal its course by taking refuge under its bed instead of running

honestly along above it, the effort is hopeless in an age when the scientist is abroad. It is said that there are no secrets in heaven, and apparently nature is very like paradise in this respect at least, for it is quite useless for her to pretend to keep her operations to herself. The specialist, the expert, surprises every secret she may treasure.

Of all the rivers in Arizona no one has more entirely defied all the accepted traditions of staying in its place and keeping within its own limits than has the Colorado, which, not content with the extraordinary part it plays at the bottom of that Titanic chasm, the Grand Cañon, is now creating an inland sea, named the Salton Sea, in Southern California. Prof. N. H. Newell, the government expert hydrographer of the United States Geological Survey, has given close attention to the Colorado of late, and of it he says :

". . . The Colorado cuts in its course the deepest cañons on the face of the earth. From the solid rocks where it has made them, through hundreds of miles, it has taken material down to the Gulf of California, and by slight but regular annual overflows gradually built banks on each side out into that gulf. These, in time, cut off the head of the gulf, leaving dry a depression in Southern California, considerably below sea level, known as 'the Salton Sink.' For miles of its journey the Southern Pacific runs below sea level. Ten thousand people, approximately, in what is known as the

LOOKING THROUGH A PART OF THE RIVER GORGE, FOOT OF BAD TRAIL, GRAND CAÑON

Imperial Valley, live below the sea level. A privately owned irrigation enterprise, on the Mexican side of the line, cut a gash into this bank of the Colorado which nature had been forming. The high waters came and man lost control of his artificial channel, with the result that the river thought best to pour its waters back into the depression which had once been a part of the Gulf of California. To get the river to resume its own course is no small task, and with it the Southern Pacific railroad evidently purposes to grapple heroically.

"The river is now pouring down a steep declivity into this basin, which is two hundred feet or more below the sea level. If this were allowed to continue, it would make a great salt lake in Southern California. This water has already risen to the point where it has submerged big salt works and fifteen miles of the Southern Pacific's overland track, forcing that company to build around the rising sea, and, unless its engineers succeed in routing the Colorado for its old destination, it will be necessary to rebuild a much longer piece of that road. Some people have argued that such a sea would affect favorably the climate of Southern California, but they forget that the great Gulf of California, jutting into the most barren regions of the United States and Mexico, seemingly has had no good effect on the climate of either. The Salton Sea would add only two per cent of water surface to that part of the country, and so hardly would do what the Gulf of California has not accomplished. Unless the break is restored, the river will pour into this basin, forming a very shallow lake,

which would be almost a frying-pan under that semi-tropical sun. This would continue to rise until evaporation balanced the river flow, and then would fluctuate with the seasons of the year, shrinking in area during the months of the heaviest evaporation and slightest inflow.

"The gash in the river bank was cut by a Mexican corporation on that side of the international line, but the water is delivered to a number of American corporations, so that to-day several are concerned in the affair. It is understood that the Southern Pacific, when the river reaches its lowest stage, will put in a great force of men in an endeavor to get the river back to its former course. One great difficulty comes in the sugar-like material which has been eroded, in which it is extremely hard to insert any permanent structure. A pile one hundred feet deep will be driven into it, and almost as soon the water, working in under it, will lift it out."

The Salton Sea, at this writing, covers an area of over four hundred square miles, and is constantly increasing. The Southern Pacific Railway that traversed its border has been driven twice from its line and forced to lay new roadbeds and tracks. It is also creating great confusion as to irrigation facilities, both in the United States and in Mexico, within the region where it lies; and as a scientific event it is one of the first magnitude, — an act in the drama of nature made visible to all.

The Salton Sink has long been known to the explorers and visitors of this region. It was a vast basin of some

one hundred and forty miles in length and sixty-five or seventy in width; the evident bed of a former sea, which had become a desolate and barren waste. Sometimes a mirage — a not unfrequent phenomenon in Arizona and Southern California, — would transform this long deserted basin into a phantom sea, wonderful in aspect. To what extent this transformation will continue defies prophecy.

Phœnix, the capital of Arizona, is in Maricopa County, — a county as large as the entire state of Massachusetts. The journey of two hundred miles between Ash Fork and Phœnix is one of the most uncanny and unearthly sort of trips, with mountains resembling a witches' dance, — full of grotesque wonder and romantic charm, — but the experience is almost like visiting another planet and coming under totally different conditions of life. Phœnix is both the capital and the metropolis of Arizona, and no city west of the Mississippi is more popular among tourists or is able to inspire a stronger sentiment of attachment among its residents. To some twelve or thirteen thousand inhabitants are added, every winter, from four to five thousand tourists. The city lies in the centre of the Salt River Valley, — that marvel of the Southwest. The most important and valuable agricultural region in Colorado lies in Maricopa County, of which Phœnix is the pet and pride. In this locality the visitor to Arizona returns to the normal day and daylight world again. The forest

trees are not stone quarries, nor have meteors, wandering through space, buried themselves in its soil. There is no need of colossal magnetic appliances to seek to discover and extricate some submerged star. Nor has the earth opened and disclosed an Inferno, "bathed in celestial fires," as that of the Grand Cañon far away to the northwest. The streams "stay put" within their legitimate borders, and are apparently as firm in "standing pat" as is the Republican party over a (new) tariff revision. Maricopa County pursues a way of peaceful prosperity, with no lapse into the vaudeville of petrified forests and buried stars. Her stars make their appointed rounds in the skies, and shine nightly upon the just and the unjust. In the northern part of Maricopa there are mineral districts of rich ores, gold and copper as well as silver, lead, and others, but chiefly the county holds her way as an agricultural region, indulging in no freaks. Canals radiate in every direction from the Salt and the Verde rivers. The Salt River Valley is so level that a theory prevails that in some prehistoric ages it was smoothed by the Toltec civilization, which even preceded that of the Aztec. Fields of alfalfa, miles in extent, smile in the sunshine, while cattle graze knee-deep in luxurious clover. Orange groves alternate with the apple and apricot orchards. The date-palm, the fig, and the olive trees abound. Beautiful homes stand in spacious grounds shaded by the dark foliage of the umbrella tree, through which gleams the

scarlet of the oleander and the brilliant gold of the pomegranate.

Phœnix offers to the resident or the visitor a good proportion of the best that life can give : in good society, that which is intelligent, moral, cultured, and sympathetic ; in an admirable school system ; in churches of many denominations, — Catholic, Episcopal, Methodist, Baptist, Presbyterian, Christian Science, and others, — all having their fine houses of worship and earnest congregations. There is an excellent and a constantly growing public library, and there are four daily and several weekly newspapers, business blocks that would do no discredit to any large Eastern city, a circuit telephone system completely equipped, gas and water works, free city and rural mail delivery, good hotels, a theatre, and an opera house. There are banks and a Board of Trade. There are clubs both of men and women. The State Normal School of Arizona is nine miles distant — in Tempe.

There are three railroads that centre in Phœnix which transport the traveller with the usual accepted ease and luxury of modern railroading ; and a new road to form a link in a second Santa Fé transcontinental line will then place Phœnix on a trunk road over which the Santa Fé traffic will largely pass.

The winters in Phœnix are most attractive. From October till May there is a climate all balm and sunshine without the enervating quality felt in the tropics. The

region all around has good roads, and driving and riding are most enjoyable.

Seventy-five miles east from Phœnix, in the Tonto Basin, the government is building a vast water storage dam which it is expected will liberally irrigate two hundred thousand acres of land which, under reclamation, will produce in rich abundance both agricultural and horticultural products. The climate and conditions combine those of the temperate and the semi-tropical zones and favor products grown in both. The Tonto dam will be, with the possible exception of the Assouan dam in Egypt, the greatest storage enterprise in the world. It will be constructed of hard sandstone imbedded in cement, making it as permanent as the mountains. It will be two hundred and eighty-five feet above foundations and only two hundred feet wide at the bottom. Above will be a lake about twenty-five miles long, with storage capacity for one and a half millions acre-feet, which means enough water to cover that number of acres a foot deep. Even to the best of cement, Nature has provided on the ground every necessity for construction. Along the hillsides above is being dug a power canal, to discharge above the dam, there to generate not less than five thousand horsepower, — more than enough for the demands of construction. When the dam is finished this power will be transmitted electrically to the vicinity of Phœnix, here to be used for pumping. The government engineers have made plans for eventually

developing eighteen thousand horsepower, by harnessing the falls of the river and the canals.

The Salt River Valley has more than fifty thousand acres devoted to alfalfa, which sometimes yields six crops in a year. Wheat, barley, and corn are also grown, and the orange groves produce the finest fruit known in the Eastern markets, antedating by a month the California oranges. Grapes, apricots, and dates abound; and if Maricopa County does not literally as well as figuratively find that her land is flowing in milk and honey, it is certainly not for lack of the most favorable conditions.

The Arizona strawberries, too, are a feature of importance in the fruit market, as for both size and flavor they absolutely exceed almost any other in the United States.

All this sunny prosperity of conditions and loveliness of climate reacts on life. There is a poise, a serene confidence, and a charm of good-will and joyous companionship felt in Phœnix that give to this delightful young city an individuality of its own.

The great dam now being built in the Tonto Basin has made it necessary to destroy the town of Roosevelt, — a village of two thousand inhabitants, with its churches, schools, water-works, electric lights, and other appliances of modern civilization. "Roosevelt must perish," writes a press correspondent, "that a desert may be made to bloom. Already the marvellous engineering work is well under way. The walls of the narrow cañon through which Salt

River rushes on edge are being locked by a massive monolith of solid masonry, the highest arch dam in the world."

The writer continues:

"This wonderful structure of sandstone and cement will be two hundred and eighty feet in height from foundation to parapet. Placed by the side of an eighteen-story skyscraper, this dam would rise ten feet above it, while its length on top would be more than two city blocks. A turbulent stream, with its enormous floods, will beat itself into stillness against the masonry monster, its foam and spume lost in a deep lake twenty-five miles long and two miles wide.

"By day and by night the dull roar of dynamite breaks the desert stillness, and the cañon walls go crashing down to furnish material for this structure. On the hill far above, the rock crushers never stop grinding the limestone, and great kilns, white hot, are burning daily hundreds of barrels of cement.

"When night comes, myriads of electric lights burst forth, weirdly illuminating a busy army of toilers working gnome-like in a shadowy cañon. A star-gemmed heaven looks down upon a wondrous scene, unreal, awesome, and inspiring.

"This great work of the government possesses unusual attractions for the engineer and the layman. It is located in a valley which has been the abode of three races, one of which lived here when Cæsar sat upon his throne. In an age forgotten the cliff-dwellers built their eyrie-like homes along the cañons of this stream, and in the narrow valleys the lines of their irrigation canals may yet be traced. Centuries later

the Apaches came, and for many years their tepees dotted the basin. Then came the white man, who sought to reconquer the desert, which had resumed its sway after the cliff-dwellers vanished.

"The battle with unfriendly nature proved too much for the pioneer, and Uncle Sam took a hand in the fight. No problems could daunt his engineers. They laughed at floods and mocked at desolation. A dam site was discovered sixty-two miles from a railroad, and they proceeded to connect it with civilization by a marvellous road which winds its way for forty miles through deep cañons, along the face of frowning precipices, over foaming cataracts, and across broad areas of treeless desert. It opens up to the transcontinental traveller a new region of compelling interest and of splendid scenery. Better than that, it provides an easy thoroughfare for the transportation of heavy machinery of all kinds and the supplies for the new community which sprang into life almost at a word.

" . . . Every stone that is laid in the narrow arch, which is to retain the foaming river now rushing through the cañon, brings nearer and nearer the day when Roosevelt shall vanish beneath an inland sea. When the great dam is completed, in 1908, and its massive gates of steel, weighing eight hundred thousand pounds, are shut down, a rising flood will cover the site of the city with two hundred feet of water.

"The ingenuity of man has been taxed in this work. Its isolated position, the difficult physical conditions, the tre-

mendous and unexpected floods, have tried the mettle of the engineers. The enormous amount of cement required was in itself a problem which forced Uncle Sam to turn manufacturer in order to solve it. Nature, having kindly furnished an ideal site for a dam, was thoughtful enough to provide materials near at hand for making cement. A cement mill was quickly erected at a cost of one hundred thousand dollars. The downward rush of the river was utilized for electric power to operate the mill, and many thousand barrels of first-class cement have already been used in the works.

"But while the city of Roosevelt, with the homes of its two thousand inhabitants, is doomed, a fair valley is to be redeemed in which the agricultural possibilities are not exceeded anywhere in the world. Under almost tropical skies, with a soil of wonderful fertility, the farmer in Salt River Valley will cultivate his orange groves, his fig trees, his vines, while his broad meadows will yield him heavy harvests of alfalfa six and seven times a year.

"The great lake which will be created by the Roosevelt dam is to be tapped by canals hundreds of miles long and extending all over the broad valley around Phœnix. Vast areas now absolutely worthless will be transformed quickly into blossoming orchards and purpling vineyards, and hundreds of happy homes will dot a plain where now the giant saguaro rears its spiny head and the gila monster roams at will."

Life in the Far West is a continual series of the occurrence of such events as these. Its problems are

largely solved by the civil engineer and the irrigation expert, who transform vast deserts to regions of blossoming beauty, change the course of a river, send railroad trains climbing the mountain peaks or penetrating beneath the range, and who are, in short, the modern magicians who work their will with the forces of nature. The National Reclamation Act is fairly recreating the entire Southwest.

The Gila River, which is the largest tributary of the Colorado, flows through the regions south of Florence, Arizona, and affords water to many fertile and beautiful valleys; and Florence, with the towns of Yuma, Tucson, Glendale, Bisbee, Winslow, and others, is fully abreast in modern life. Large department stores, public libraries, schools and churches, women's clubs, daily newspapers, good railroad facilities, free postal delivery, — all these make up the environment of a splendid and progressive citizenship. As the Governor of Arizona, Hon. Joseph H. Kirley, has recently said:

"Nowhere can a man who respects his neighbor's rights, with reasonably strict attention to his own business, go about with more freedom and with greater confidence of personal safety than in Arizona. Locked and barricaded doors are in most parts of Arizona a novelty. The professional thief is almost unknown in the territory."

The East — at least the portion of it that has not personally visited the magic land of Arizona — can form

little idea of its marvellous resources and its potent achievements.

The statehood problem looms up on the social and political horizon, and there is a strong feeling that to force Arizona and New Mexico into union would do violence to the judgment and the feeling of the citizens of Arizona. For several years past the incipient possibility of statehood on these terms has aroused widespread opposition.

The local press voices almost daily the editorial convictions that such a union would be most disastrous to the interests of Arizona — a country which is simply a wonderland of treasure and rich and varied resources. Arizona is settled chiefly by people from the great South and from New England, the Middle West being hardly represented; its citizens are of the best quality of our national life, and to unite them with those of New Mexico — a large proportion of whom can hardly speak or understand the English language even, to say nothing of their divergence in race, requirements, and habits from the population of Arizona — would be imposing upon them a century's delay in realizing the grand ideals of education, moral progress, and economic development now prevailing in Arizona.

Phœnix has to-day a better public-school system than Boston, and other surprising degrees of progress might be related of many of the towns.

Hon. N. O. Murphy, twice a Governor of Arizona,

has recently made an eloquent plea against forcing these two territories into union as a state. Ex-Governor Murphy was appointed by President Harrison (in 1889) Secretary of Arizona. Under President Cleveland he was elected the Delegate to Congress representing the territorial interests; and on the expiration of this term he was appointed by President McKinley the Governor of the territory. His experience has given him the most intimate knowledge and wide grasp of territorial conditions, and in a letter of three columns over his own signature to the "Washington Post," appearing under date of February 25, 1906, ex-Governor Murphy does not hesitate to say that were the Bill for united statehood then pending before Congress passed, it would be one of the greatest legislative outrages ever perpetrated in this country. "I refer particularly to the proposed merger of the territories of Arizona and New Mexico into a single state against the protests of the people of those territories," he added.

The ex-Governor points out these statistical facts:

The area of New England, comprising six states, with twelve senators, is 66,465 square miles; the area of the territory of Arizona is nearly twice as great, being 113,916 square miles.

The area of the territories of New Mexico and Arizona, now proposed to be merged, is 235,600 square miles, or greater than Maine, Massachusetts, New Hampshire, Vermont,

Rhode Island, Connecticut, Michigan, New York, Pennsylvania, Maryland, and New Jersey, represented in the Upper House now by twenty-two senators."

The fact that the population of New Mexico is largely Mexican, and that of Arizona is mostly American, suggests a potent reason for the strong feeling in Arizona against this proposition. Their racial instincts and their business interests alike conflict. If they are joined as a single state, there will be continual jealousy and friction, and legislation to promote the interests of one-half the state will necessarily be at the expense of the other.

To the traveller sensitive to the spell of a strange, unearthly beauty, Arizona prefigures itself as the country God remembered rather than as "the country God forgot." It is at once the oldest and the newest of the states. Its authentic and historic past antedates the coming of the Mayflower to the rocky and desolate December shores of Massachusetts, while its future flashes before one like an electric panorama outspeeding wireless telegraphy. It is the Land of Magic and Mystery. The light is a perpetual radiance, as if proceeding from some alchemy of distilled sunshine. While Colorado is the Land of Perpetual Dawn, of an heroic and poetic achievement, Arizona is the region of brooding mystery, of strange surprise.

There are the music and pictures of Arizona in her fertile valleys, her wide rolling mesas; and the very melody of the wind harps meet and mingle with the

organ strains of sweeping orchestral effects of the winds in the cañons and in wild, desolate gorges where impenetrable twilight renders them a veritable No Man's Land. Mr. Aldrich's "Two Shapes" might have met in that uncanny region of the Petrified Forest. The very dance of the Brocken may nightly be seen in the midnight fissures and steep precipices of the Grand Cañon.

It is, however, essentially the land of mirage and mystery, this wonderful Arizona! As one journeys about he half fancies that he hears on the air those magic lines:

> "O birds of ether without wings!
> O heavenly ships without a sail!"

Every incredible thing is possible in this miracle country, where purple mountain peaks quiver in the shimmering golden light, where ruins of remote ages stand side by side with the primitive mechanism of pioneer living, where snow-capped mountain peaks are watched from valleys that have the temperature and the productions of the tropics. Arizona contains unknown and undreamed of resources of gold, copper, and silver. The state has the richest possibilities in mineral wealth; there are thousands of square miles of range lands; there is wealth of forests, although it is a part of the miracle character of this state of color and dream life that its forests are almost as much concealed from casual view as are its minerals hidden in the depths of the earth, for they are

secluded in deep cañons or they are high out of sight on the mountain summits. In fruits and flowers Arizona has the luxurious growth and lavish abundance of the tropics, producing grapes, figs, oranges, lemons, pomegranates, pineapples, and peaches, — almost everything, indeed, unless it be the apples of Hesperides.

Although Arizona has not the electric exhilaration and infinite energy of Colorado, it has a delicious quality, as if the very air were a caress. Though warm in the south, the heat has none of the enervating effect of the heat where humidity combines with it. The heat here is so dry, the air so pure, that there is little extreme discomfort even when the mercury soars to legendary altitudes. In winter all Southern Arizona is a paradise of loveliness. At this season the towns of Florence, Phœnix, Tucson, Yuma, and other points invite one to the balmy air, the luminous brilliant skies, and the nights, which are a glory of starry illumination. Northern Arizona has a perfection of summer climate, and the Grand Cañon is destined in the near future to become one of the great summer resorts of the world. With the splendid facilities for comfort offered by the arrangements, the traveller finds all his accustomed conveniences, and the cañon has literally all seasons for its own. There is one glory of July and another glory of January; there is a transcendent loveliness of June, and an equally indescribable charm of October. No month is without its special reasons for

visiting at that time this most marvellous scenic wonder of the entire earth.

In remote ages Arizona was evidently an inland sea.

Montezuma Well, on the Verde River, some fifty miles from Prescott, is one of the strange spectacles of Arizona. The well is on an elevated mesa of solid limestone. It has a circular opening some six hundred feet in diameter, as perfect as if carved by a skilled workman. From the surface opening down to the water is a distance of some seventy feet, and the water itself is over one hundred feet deep. It is perfectly clear and pure. Near the well are several cave dwellings, and fragments of pottery abound in the vicinity. There are beds of lava, also revealing that the well is the crater of an extinct volcano.

There can be no question but that Arizona is one of the most marvellous regions of the world. Its interest to the tourist is not exceeded by that of the Yellowstone, whose mountains and geysers and strange color effects enchant poet and painter. For the cañon system of the Arizona mountain ranges, the stupendous majesty of scenic grandeur which reaches its supreme aspect in the Grand Cañon of the Colorado, the wonders of extinct volcanic action, the colossal channels cut by the action of water, the unearthly splendor of the coloring in sky and atmospheric effects, all combine to make this state the very embodiment and visible expression of magic and mystery.

In the broken mountain ranges the detached peaks extend, with narrow, fertile valleys lying between; while deep cañons and wild gorges, with rushing mountain torrents, still further diversify the grandeur of the panorama. Five great rivers add another impressive feature, — the Colorado, the San Juan, the Salinas, the Verde, and the San Francisco, — this system of rivers completing the most extraordinary combination of mountain, valley, mesa, and cañon to be found in the entire world. Numberless extinct volcanoes and vast lava beds add their fantastic imagery; and the metamorphic rock strata, recording the most violent volcanic upheavals, tell the prehistoric story of the fiery molten flood which swept over all this region when the earth was new.

As has perhaps been suggested in the preceding pages, life in Arzona is by no means without its features of entertainment. These include various aspects, not to mention one that is by no means to be enjoyed in any of the great Eastern centres, — that of the exclusive annual festivity of the "Snake Dance." Chicago and Paris, New York and London, may find social entertainment in balls and opera, dancing and dining, but in Arizona one goes to this entertainment on the Painted Desert; and if in some happy summer of life one's horoscope has deflected his course into Arizona and Colorado, one comes to regard those fascinating localities with the devotion of a native of their sunny climes.

After all, it is not length of time in any experience of life that is significant, but intensity of feeling, and one finds himself really living more intensely in a few weeks in the Far West, in all its wonder world, than in years or decades of his accustomed rounds in Eastern cities.

This entertainment of the Snake Dance is furnished by the Moki Indians at their camp some seventy miles over the desert from Flagstaff. There is no means of conveyance save by wagons. The journey is over sagebrush and sand, enlivened by stones and cacti. The horses can make only slow progress. But the air is simply delightful and full of exhilaration, and the particular desert over which those who fare forth for this æsthetic spectacle must pass is the "Painted Desert," whose walls of rocks and mountains, brilliant in a dream of color, recede as they are approached, and thus the entire two days consumed in the journey are a perpetual delight to the eye. The wayfarers camp out overnight, and during the five days' journey — two days to go, two to return, and one to stay — their wants are, perforce, reduced to the most primitive. As the festivity lasts only twenty-eight minutes, it is certainly spending a good deal of time and energy in order to behold so brief a spectacle. But one is told it is worth all the fatigue and the time. It is a religious rite of the Moki Indians, and is a prayer for rain. The description of it is a literal one, for the dancers hold from one to three snakes — and rattlesnakes at that — in the mouth

as they perform their strange gyrations. The dancers are the "braves," while the squaws chant a crooning accompaniment.

One student of this Indian rite has said:

"With the first glow in the east the priests hasten to the shrine of the Sun God with their offerings, the luminary himself being greeted with a prayer or with songs as he slowly emerges from behind the mesa in the Far East. Later the priests repair to their homes, and return to the kiva, bearing the ceremonial paraphernalia with which, early in the afternoon, they robe themselves in gorgeous array preparatory to the dance, which is given usually before the sun sets behind the San Francisco Peaks.

"As the priests emerge from the kiva, where they wait in line until all have appeared, there is the hush of expectancy throughout the village; the inhabitants now line the terraces, house-tops and every available spot around the dance plaza, all being attired in their gayest and brightest costumes. In single file and with measured tread comes the line of priests. Entering the plaza, they wheel about and begin a slow, short dance, the time of the step being accompanied by the shaking of rattles and by the singing of sacred songs. The dance is over all too soon, when the spectators return to their camps and the priests to the kiva, where great quantities of food have been brought for them. Finally, in a great feast, they break the fast, which, on the part of the chief priests, has been maintained for many days."

It is quite by way of being love's labor lost to visit Arizona during that period of time devoted to the Moqui Festival. Apparently the entire population betake themselves to this entertainment, journeying over the desert in their wagons, carrying with them their beds, their food, and every necessity, for except what they take with them they must do without. But as all the world, alas, cannot or does not dwell in Arizona, — a region in which any one sunset alone is worth the journey there, — and is thus deprived of the unique privilege of assisting at the Snake Dance, the next best thing, as a substitute, is to read the new work of George Wharton James (the author of "In and Around the Grand Canyon") called "Indians of the Painted Desert Region." It is the very gateway to a wide and deeply interesting knowledge of Indian life in Arizona and its relation to advancing civilization. It is the presentation of a series of wonderful landscapes in a vivid manner of word-picturing.

"Wild, weird, and mystic pictures are formed in the mind by the very name — Painted Desert," writes Mr. James. "The sound suggests a fabled rather than a real land. Surely it must be akin to Atlantis or the island of Circe or the place where the Cyclops lived. Is it not a land of enchantment and dreams, not a place for living men and women, Indians though they be?"

It seems that the Spaniards gave the name "El Pintato Deserto" — the Painted Desert.

"Stand with me," writes Mr. James, "on the summit of one of the towering mountains that guard the region, and you will see such a landscape of color as exists nowhere else in the world. It suggests the thought of God's original palette, where he experimented in color ere he decided how to paint the sunset, tint the sun-kissed hills at dawn, give red to the rose, green to the leaves, yellow to the sunflowers. . . . Look! here is a vast field of alkali, — fine, dazzling white. Yonder is a mural face half a thousand feet high and two hundred or more miles long. It is over a hundred miles away, but it reveals the rich glowing red of its walls, and between it and us are vast patches of pinks, grays, greens, carmines, blue, yellow, crimson, and brown, blending in every conceivable shade in a strange and grotesque yet fascinating manner. It is a rainbow petrified. It is a sunset painted on desert sands."

And here art and archæology may revel. "History — exciting, thrilling, tragic — has been made in the Painted Desert region; was being made centuries before Lief Ericson landed on the shores of Vinland or John and Sebastian Cabot sailed from Bristol. . . . In the Painted Desert region we find peoples strange, peculiar, and interesting, whose mythology is more fascinating than that of ancient Greece, and for aught we know to the contrary, may be equally ancient; whose ceremonies of to-day are more elaborate than those of a devout Catholic, more complex

than those of a Hindoo Pantheist, more weird than those of a howling dervish of Turkistan. . . . One of the countries comprised in the Painted Desert region is the theme of an epoch . . . reciting deeds as brave and heroic as those of the Greeks at Marathon or Thermopylæ; a poem recently discovered after having been buried in the tomb of oblivion for over two hundred years. Here are peoples to whom a written letter is witchcraft and sorcery, and yet who can read the heavens, interpret the writings of the clouds, deserts, and cañons with unerring certainty. . . . A land it is of witchcraft and sorcery, of horror and dread of ghosts and goblins, of daily propitiations of fates and powers, and princes of darkness and air, at the very thought of whom withering injuries are sure to come."

One is tempted to run on and on in quotation from this fascinating book, which depicts the strange life and the marvellous scenery in the country "where atmospheric colorings are so perfect and so divinely artistic that desolate deserts are made dreams of glory."

Harriet Monroe, the Chicago poet, playwright, and most charming of essayists, who by no means limits her séances with the Muses to those particular hours in which she dons her singing robes, has given this prose-poem picture of a scene on the "Painted Desert":

"The rocks lay in belts as red as flame, yellow as gold, purple as violets, and they seemed to shine of their own light; the City of Rocks, flaming red, and high as mountains;

one thousand foot walls sheer to the desert, all carved in needles, spires, towers, castles — the most tremendous thing on earth — there it lay!"

Of the sudden climatic changes of the desert Professor James says:

"I have been almost frozen in its piercing snowstorms; choked with sand in its whirling sandstorms; wet through ere I could dismount from my horse in its fierce rainstorms; terrified and temporarily blinded by the brilliancy of its lightning storms, and almost sunstruck by the scorching power of the sun in its desolate confines. . . . With my horses I have camped, again and again, waterless, on its arid and inhospitable rocks and sands, and prayed for morning, only to resume our exhausting journey in the fiercely beating rays of the burning sun; longing for some pool of water, no matter how dirty, how stagnant, that our parched tongues and throats might feel the delight of swallowing something fluid. And last year (1902), in a journey to the home of the Hopi, my friends and I saw a part of this desert covered with the waters of a fierce rainstorm as if it were an ocean, and the 'dry-wash' of the Oraibi the scene of a flood that for hours equalled the rapids of the Colorado River. Desert though it is in the main, — barren, wild, and desolate, — here and there within its boundaries are fertile valleys, wooded slopes, and garden spots as rich as any on earth; and the people who make their dwelling-place in this inhospitable land present characteristics as strongly contrasted as those

of nature. Here are peoples of uncertain and mysterious origin whose history is preserved only in fantastic legends and traditional songs; whose government is as pure and perfect as that of the patriarchs, and possibly as ancient, and yet more republican than the most modern of existing governments; 'peoples whose women build and own the houses, and whose men weave the garments of the women, knit the stockings of their own wear, and are as expert with needle and thread as their ancestors were with bow and arrow, obsidian-tipped spear, or stone battle-axe. . . . Here are peoples of stupendous religious beliefs. Peoples who can truthfully be designated as the most religious of the world, yet peoples as agnostic and sceptic, if not as learned as Hume, Voltaire, Spencer, and Ingersoll. Peoples to whom a written letter is witchcraft and sorcery, and yet who can read the heavens, interpret the writings of the woods, deserts, and cañons with a certainty never failing. . . . Here are intelligent farmers who for centuries have scientifically irrigated their lands and yet who cut off the ears of their burros to keep them from stealing corn. . . . Peoples who pray by machinery as the Burmese use their prayer wheels, and who 'plant' supplications as a gardener plants trees and shrubs. . . . Peoples who are pantheists, sun worshippers, and snake dancers, yet who have churches and convents built with incredible labor and as extensive as any modern cathedral. Peoples whose conservatism in manners and religion surpasses that of the veriest English Tories; who for hundreds of years have steadily and successfully resisted all efforts to 'convert' and change them, and who to-day are as firm in

their faiths as ever. . . . Peoples to whom fraternal organizations and secret societies, for men and women alike, are as ancient as the mountains they inhabit, whose lodgerooms are more wonderful, and whose signs and passwords more complex, than those of any organization of civilized lands and modern times."

One of the most weird and fascinating experiences in Arizona is a visit to "Assamanuda," the "Country of the Departed Spirits." This is the poetic name the Iroquois Indians give to the Painted Desert. This vast plain stretches away with gigantic horizontal columns, the remains of vast layers of sedimentary rock, from which the rains of prehistoric ages have washed away the connecting earth, and the columns are streaked and mottled with scarlet, due, it is said, to the oxidization of particles of feldspar in the granite of which these rocks are composed. Here may be witnessed in its perfection the Fata Morgana. In the air appear palaces, hanging gardens, and temples; fountains and wonderful parks adorned with sculpture; towers and turreted castles; beautiful villas with terraced lawns and cascades of water thrown high in the air; rose gardens and hills, where the deer and the antelope are seen; all these and other visions of loveliness are pictured on the air in a perfection of light and shading. It is not difficult to fancy that one is really gazing into the ethereal world, beyond the pearly gates, and gazing indeed into "the country of departed spirits."

SUWARA (GIANT CACTUS), SALT RIVER VALLEY, ARIZONA

All Northern and Northeastern Arizona are comprised in the region, — Nature's picture gallery. Dr. Newberry, the geologist, who explored all the regions east of the upper Colorado as far as the junction of the Green and the Grand rivers, thus pictures one view of the plateau:

"Directly south the view was bounded by the high and distant mesas of the Navajo country, succeeded in the southwest by the still more lofty battlements of the great white mesa formerly seen from the Moqui pueblos. On these high tablelands the outlines were not only distinctly visible, but grand and impressive at the distance of a hundred miles. Nearly west a great gap opened in the high tablelands through which the San Juan flows to its junction with the Colorado. The distance between the mesa walls is perhaps ten miles, and scattered over it are castle-like buttes and slender towers, none of which can be less than a thousand feet in height, their sides absolutely perpendicular and their forms wonderful imitations of architectural art. Illuminated by the setting sun the outlines of these singular objects come out sharp and distinct with such exact similitude to art that we could hardly resist conviction that we beheld the walls and towers of some ancient Cyclopean city, hitherto undiscovered."

Every journey in Arizona seems to lead on into an enchanted world. The gray valley road, the curious mesa formations that stretch into infinite distances; the mystic apparition in the Estrella range of the Montezuma faces; the ruins of Casa Grande, which tell their tale of a massive

city that once existed here; the ruins on the Rio Verde; the mounds and shafts discovered belonging to some prehistoric civilization; the ancient watch tower; the painted rocks, with their extensive hieroglyphics, — all speak to the archæologist in a language that fascinates the imagination. Its three greatest features — the Grand Cañon, regarding which there is neither speech nor language; the Petrified Forest, and that Submerged Star known as "Meteorite Mountain" — would alone make it the world mecca of scientists; to say nothing of the strange ruins of prehistoric peoples, of an unearthly beauty of atmospheric coloring, and of the contemporary scientific interest of the great Lowell Observatory at Flagstaff, or the splendid progress and development of the people. It might well have been of this marvellous country that Emerson wrote:

"And many a thousand summers
My gardens ripened well,
And light from meliorating stars
With firmer glory fell.

"I wrote the past in characters
Of rock and fire the scroll,
The building in the coral sea,
The planting of the coal.

"And thefts from satellites and rings
And broken stars I drew,
And out of spent and aged things
I formed the world anew."

What is the world that shall be in this mystic Arizona? What, indeed, was the world that has been there? Imagination falters alike before the stupendous marvels of its past, the picturesque splendors of its future. Its scenic grandeur will make Arizona a world centre; the nations from afar will make their pilgrimage to the sublimest marvels of all nature's revelations to this planet. Here will be sought the counsel of the gods. The message of the prehistoric past and of the undiscovered future will "give the law of night and day" in wonderful Arizona, the land of magic and mystery.

CHAPTER IX

THE PETRIFIED FOREST AND THE METEORITE MOUNTAIN

"A spell is laid on sod and stone,
Night and day are tampered with.
Every quality and pith
Surcharged and sultry with a power
That works its will on age and hour."

EMERSON

A JUNE day in the Petrified Forests of Arizona is an experience that can never fade from memory. Every excursion into this strange, uncanny realm of Arizona, which is an empire in its area; every journey one takes, every trail he follows, leads into strange and fascinating locality; and Adamana, the gateway to the Petrified Forests, has its own spellbinding power for the tourist. Adamana consists of a water tank, the station, and two bungalows, in one of which very comfortable entertainment is offered, and in the other of which dwells a character whom all travellers meet, — Adam Hanna, a distant relative of the late Mark Hanna, the original settler of this region. For a long time the place was known as Adam Hanna's, and when with advancing civilization this designation

became too colloquial for an up-to-date twentieth-century world, the elision of two or three letters gave the present attractive name, — Adamana.

To leave the comfortable ease of a Pullman sleeper at the witching hour of five in the morning to stop over at Adamana and visit the Petrified Forest requires a degree of fortitude beyond that usually calculated. Left to one's self, one would emulate the example of the man who journeyed to the north pole to see a sunrise that occurred only three days in the year. On the first two mornings he refused to rise on the plea of the further extension of his opportunities; on the third, when his servant reminded him that it was the "last call," he turned over and philosophically remarked that he would come again next year. But the dusky porter allows the tourist no such margin for reflection, and one finds himself standing in some wonderful place spellbound by the witchery of the desert, and the long train vanishing in the distance, almost before he knows whether he has exchanged the land of dreams for the land of day and daylight realities, — for this weird and mystic panorama of the infinite desert, with the bluest of turquoise skies already lighted by the blazing splendor of the June sunrise, and the grotesque, uncanny buttes scattered at intervals all over that vast plain. The intense silence was unbroken save by the voice and footstep of the man representing the little bungalow termed the Forest Hotel. Contrary to one's preconceived ideas of an Arizona

desert, the morning was cold, and the blazing fire and hot coffee were most grateful. But where was the "Petrified Forest"? one marvelled. Away on the horizon gleamed an evanescent, palpitating region of shimmering color. Yet this was not the "quarry of jewels," but the "Bad Lands," which have at least one redeeming virtue, whatever their vices, — that of producing the most aërial and fairy-like color effects imaginable.

It is astonishing how swiftly one relinquishes preconceived ideas of living and learns to get on without electric bells, long-distance telephones, and elaborate conveniences in general, even to the "prepared air," strained through thin layers of cloth, as the latest superfine condition added to a great New York hotel, and adapts one's self to a mode of life in which a simple but very clean room, primitive food, wonderful air, good, kind people, and a petrified forest to amuse him, take the place of the complex and elaborate life of the great Eastern cities. At Adamana one finds himself seventy-five miles from Gallup, New Mexico, the nearest town of any importance, from which all household supplies must be ordered. When the coffee gives out, for instance, seventy-five miles from a lemon; and when a Sunday and a holiday have almost followed each other, thus delaying all orders, one has then the most delightful and spacious opportunities for experimenting on the simple life. The desert offers other things; and while these do not include the menu of

Sherry's, for instance, they do include certain allurements for which the country might be searched in vain, as they only exist on the Colorado desert. The quality of the air, the color of the sky, the marvel of color vistas, — all make up a new world in which one finds himself fairly questioning regarding his own identity. Nor has he any apparent test by which to determine —

"If I am I, as I do hope I be."

Perhaps, indeed, he does not so tenaciously cling to that which he remembers of himself yesterday, and is rather interested, on the whole, in accepting some possibly new transformation of his being. The locality seems to him sufficiently well indicated as being, according to his first impression, simply somewhere in the magic and witchery of space. This address might not be accepted by the government postal service, but even that heretofore indispensable matter in some way fades into comparative insignificance. What does one who has an Arizona sky, and a bewildering shimmer of color afar on the horizon that might be

"A painted ship upon a painted ocean"

or almost anything else, — what does he want of the sublunary detail of eight postal deliveries a day, beginning at half-past seven in the morning, with his first dawn of returning consciousness, and ending with midnight, when he is, very likely, summoned out of his sleep

by the rap of a bellboy delivering more mail, — more, — as if he had not been under an avalanche of it all day and had sought refuge in dreamland for the very purpose of escaping the vigilance of his national postal service. But one may as well accept the fact as one from which there is no appeal, that in the heart of civilization he cannot escape its burdens and its penalties. He can only evade them by going to — Adamana, for instance; Adamana, the metropolis of the railroad water-tank, the station, and two bungalows. Even these are too many. One bungalow is enough. He cannot repose in two at the same time; and as for neighbors and news, — has he not the stars and the sunsets? What does Emily Dickinson say? —

> "The only news I know
> Is bulletins all day
> From Immortality."

There are no birds to

> ". . . carol undeceiving things,"

as in Colorado; but there is, instead, intense silence, — a silence so absolutely intense as to be, by a paradox, fairly vocal; and if one does but catch the music of the spheres for which he finds himself listening, it must be that his powers of hearing are defective. One recalls the lines:

> "Who loves the music of the spheres
> And lives on earth, must close his ears
> To many voices that he hears."

The "many voices" are stilled; one has left them at least seventy-five miles away, — in Gallup, for instance! Gallup, that for the time prefigures itself to him as his New York, his Paris, his London. It is the source of all his possible supplies; and that it does not assume an overwhelming importance is simply because he does not want any supplies of the particular nature that Gallup — or Paris — can furnish. He has achieved something more than the power to satisfy all his (former) multitudinous wants; he has eliminated them.

To be sure, the Chinese have a proverb that it is not worth while to cut off one's feet to save buying shoes. Yet, if instead of depriving himself of feet he has achieved wings, why, manifestly, there is no need of shoes. There are, when one comes to think of it, a vast number of things in our late civilization for which there is no special need.

> "For a cap and bells our lives we pay;
> Bubbles we earn with a whole soul's tasking:
> 'T is heaven alone that is given away;
> 'T is only God may be had for the asking."

In fact, when one comes to reflect upon the aspects of his former life (as he sees them in mental panorama from Adamana), he can only arrive at the conclusion that life is unnecessarily choked and submerged under an ever-increasing burden of *things*. Emerson, of course, whose insight saw the universe as a crystal sphere which revealed

to his vision its entire working mechanism, — Emerson long since announced that

> "Things are in the saddle
> And ride mankind."

Why should one be ridden by things? Why should he enslave himself, — mortgage his entire powers of achievement, such as they are, to pay his bills to the butcher, the baker, and the candlestick maker? Is not the life more than meat, and the spirit than fine raiment? So he may dream for the moment, gazing meditatively at the water-tank, the station, and the two bungalows that comprise Adamana. Good for that day only, at least, is its contrast to the bewildering din of *entrepôts*, of ports, of custom-houses, of the general din and warfare of the world he has left behind.

Holbrook, the other station for the Petrified Forests, is twenty miles away. Flagstaff, a very thriving and interesting Arizona town, famous as the site of the Observatory of Prof. Percival Lowell of Boston, is one hundred and fifty miles to the west; and one hour of railroad journey beyond Flagstaff is Williams, the town from which runs the branch railroad to the Grand Cañon over the rolling mesas crowned with the beautiful peaks of the San Francisco mountains, a distance of sixty-three miles, the journey occupying three hours. The nearest town to Adamana station, in which a daily paper is published, is Albuquerque, in New Mexico, which is nine hundred

SAN FRANCISCO PEAK, NEAR FLAGSTAFF, ARIZONA

and thirty-five miles to the east, almost as far as from New York to Chicago. The metropolis to which this region looks as its nearest large city is Los Angeles, twenty-six hours distant. So here one is out of the world, so to speak, —

"The world forgetting, by the world forgot,"—

with the vast rolling mesas, with sandstone cliffs offering an uncanny landscape before the eye, with the eternal blue of Arizona skies bending above, with a silence so deep brooding over the desert that one might well feel himself on the moon rather than on earth, — a silence only broken by the semi-daily rush of the long overland trains and occasional freight lines that pass.

John Muir, the famous California naturalist, explorer, and author of valuable books on the Western parks, passed the winter of 1905–06 at Adamana with his two daughters, the Misses Wanda and Helen Muir, and it is he who has discovered the new Petrified Forest which he calls the "Blue Forest" — all the specimens having a deep blue tone, while the other three are simply quarries of red moss, agate, amethyst, topaz, pale rose crystals gleaming against a smoky green ground. The landscape effect of the "Bad Lands" from the little bungalow known as the Forest Hotel is of fairy-like enchantment. A shimmer of rose and gray and gold and emerald, it gleams on the horizon. Lighted by a blazing sunset, it might well be

the gates of a New Jerusalem. Anything more exquisite, and more ineffably ethereal in coloring, one might journey far to seek.

> "Moreover, something is, or seems,
> That touches us like mystic gleams,
> Like glimpses of forgotten dreams."

These lines may, perchance, come echoing around one in the air as he loiters at night on the low, long piazza, while the myriad meteors of Arizona skies blaze their way through the transparent air and a sky full of stars contends with the moon for brilliancy; the unearthly, delicate, ethereal coloring of the "Bad Lands" gleaming resplendent on the distant horizon.

If the wanderer has fallen upon particularly fortunate days in his horoscope and found Miss Wanda Muir — her quaint name coming from her mother, the daughter of a Polish nobleman — to drive him out to this marvellous "forest" of stone, he will have a pleasure enhanced by interesting conversation. A graduate of Berkeley College in California, and the constant companion of her father in his wanderings, Miss Muir is indeed an ideal guide, and under her hand one June morning the two horses sped along over the rough, stony ground at a pace to set every fibre tingling. One of the features of the Arizona desert is the arroyo, a dry stream, a ready-made river, so to speak, minus the water. Some of these even have a stream of flowing water, only it is under the bed of the river rather

than on top of it, for Arizona is the land of magic and wonder and of a general reversal of accepted conditions.

"Sometimes in driving out here," said Miss Muir, "a cloudburst comes up while we are in the Petrified Forests, and on returning the horses have to swim this dry stream. Once the water was so high it came into the wagon. Not infrequently, when we go out to the forest, some one comes dashing after us on horseback to warn us to get back as quickly as possible, or the torrents of water from a sudden cloudburst will cut us off altogether, perhaps for a day and a night." The pleasing uncertainty of life in Arizona may be realized from this danger of being suddenly drowned in the arid sands of a desert, and being confronted with a sudden Lodore that descends from the heavens on a midsummer noon. But, as one is constantly saying to himself, Arizona is the land of surprises. No known laws of meteorology, or of any other form of science, hold good here. The mountain peak transforms itself into the bottom of a sea, and the sea suddenly upheaves itself in air and figures as a mountain. Arizona is nature's kaleidoscope; it is the land of transformation.

Of the three petrified forests, each separated by a mile or two, the first is reached by a drive of some six miles, while the third is more than twice as far. The second is the largest and most elaborate, and in the aggregate they cover an area of over two thousand acres. The ground is the high rolling mesas, and over it are scattered,

"thick as leaves in Vallombrosa," the jewel-like fragments of mighty trees in deposits that are the wonder of the scientist. From the huge fallen tree trunks, many of these being over two hundred feet in length and of similar proportions in diameter, to the mere chips and twigs, the forests are transmuted into agate and onyx and chalcedony. Numbers of these specimens contain perfect crystals. They are vivid and striking in color, — in rich Byzantine red, deep greens and purples and yellow, white and translucent, or dark in all color blendings. Great blocks of agate cover many parts of the forest. Hundreds of entire trees are seen. When cut transversely these logs show the bark, the inner fibre, and veining as perfectly as would a living tree. And over all these fallen monarchs of a prehistoric forest bends the wonderful turquoise sky of Arizona, and the air is all the liquid gold of the intense sunshine.

At Tiffany's in New York may be seen huge slabs and sections of this petrified wood under high polish. A fine exhibit of it was made at the Paris exposition in 1900, and a specimen of it was presented to Rodin, the great sculptor, who was incredulous of the possibility that this block, apparently of onyx, could have been wood. Through all the forests are these strange rock formations called buttes, rising in the most weird shapes from the sand and stones and sagebrush of the vast desert. What a treasure-ground of antiquity! This region, which seems a plain, is yet higher than the top of Mount Washington, and the

altitude insures almost perpetual coolness. Scientists seem to agree in the theory that the petrified forests are a debatable phenomenon whose origin eludes any final conclusion. It is possible that some mighty sea suddenly arose — perhaps as the present Salton Sea in Southern California — and engulfed them. The land is partly the "bad lands" and partly a sandy plain covered with petrifactions. The third forest contains hundreds of unbroken tree trunks, of which some are over two hundred feet in length. Many of these are partly imbedded in the earth.

All around this high plateau rise on the horizon surrounding cliffs to the height of one hundred and fifty and more feet, serrated into ravines and gorges, variegated with the sandstone formations in all their shimmer of colors, and indicating that this basin was once the bottom of a sea.

It is the paradise of the ethnologist as well as of the geologist. Besides cliff ruins and hieroglyphics, almost anywhere, by chance, one may find traces of submerged walls, and following these, a man with an ordinary spade may dig up prehistoric pottery, skeletons, beads, rings, and occasionally necklaces. The pottery, both in design and in scheme of decoration, shows a high degree of civilization. Who were these prehistoric peoples who had built their pueblos and created their implements and pottery and were already old when Plymouth Rock was new? Much of the symbolic creation here still awaits its interpreter.

From these millions of tons of glistening, shining blocks and segments and tree trunks the tourist is not allowed to carry away specimens *carte blanche*, as formerly. The Petrified Forests are now a government reservation, although not yet one of the government parks. Small specimens, within a reasonable amount, are permitted the tourist as souvenirs.

The Petrified Forests are quarries rather than forests; the great fallen logs, branches, and chips, lying prostrate on the ground, are seen glowing and gleaming like jewels. So far as the eye can reach there is not a human habitation. Over the infinite stretch of sand and rocks bends the bluest of skies, and here and there are prehistoric Indian mines, and one ledge of cliffs on which are strange and as yet undeciphered hieroglyphics. The graves of the prehistoric inhabitants of this region are numerous, each containing rare and choice specimens of pottery which are dug out intact. This region seems to have been once thickly populated. The remains of pueblos are numerous. Skeletons are constantly being found.

Although the visitor is not allowed to carry away with him a trainload or so of specimens, he may still be permitted a beautiful cross-section of an entire tree trunk, showing all the veins of the wood and the bark, a specimen thin enough to be portable, and worthy a place in any cabinet of curiosities, besides many chips showing all the range of beautiful colors which abound in Chalcedony

Park. In this park lies a vast fallen tree trunk that forms a natural bridge over a chasm, — a bridge that seems to be of solid agate. These forests are among the great scenic wonders of the world, and if they were in the heart of the Himalayas or some other especially inaccessible spot, all good Americans would hasten to visit them. But our own wonderful and incomparable scenic grandeur is neglected. These "Petrified Forests" are the marvel of the geologist. What has happened, in all the phenomena of nature, to produce this incredible spectacle? Many scientific men believe that these forests did not grow on the spot where they now would lie prostrate, but were swept down by floods when this region was a vast inland sea, and that they became imbedded in the sand; that then the sea vanished and volcanic eruptions poured over, and the wood was hardened to rock. Again, a flood of water passed over and washed away the sand and silt, and the erosion left these thousands of acres of petrifactions exposed on the surface as now; and thus, after millenniums have passed, we have these quarries of chalcedony and agate, onyx, cornelian, topaz, and amethyst.

Every evening at Adamana disclosed a sky panorama of kaleidoscopic wonder. Afar to the horizon the Bad Lands shimmered in a faint dream of colors under the full moon. The stars seemed to hang midway in the air, and frequent meteors blazed through the vast, mysterious space. Adamana is nine hours from Albuquerque, the metrop-

olis of New Mexico, and five hours distant from Flagstaff, to the west. All the thousands of acres of desert lands about require only water to render them richly productive. But water is unattainable. There are no mountain ranges near enough to produce water storage, and unless the twentieth-century scientists discover some way of creating rain, these arid regions must remain as they are. Yet even here American life and energy and progress are seen. The scattered settlers unite in maintaining public schools six months in the year, and with only from twelve to twenty pupils the teacher is paid from seventy-five to eighty dollars a month, — more than twice the salary paid in the country schools in New England. In the little bungalow here at Adamana, where Mr. Stevenson, the government guardian of the Petrified Forests, makes tourists strangely comfortable during their desert sojourn, one finds a piano, a well-selected little library, and young people whose command of the violin and piano offer music that is by no means unacceptable. The children get music lessons — no one knows how; they are eager for any instruction in language, and acquire French and Spanish in some measure, and in all ways the national ambition is sustained. From Albuquerque comes a daily paper, and only one day behind date the Los Angeles papers arrive. One is not out of the world (alas!) even on the Arizona desert.

It is a new world in itself, — the desert of Arizona. No

region on the earth is more diversified, more intensely interesting. This desert comprises mountains and plains; it contains that one supreme scenic wonder of the world, the Grand Cañon; in it are Cañon Diablo and the Meteorite Mountain. Within its area also is the "Tonto Basin," — an incalculable chaos of isolated and unrelated cliffs, and crags of mountains peaks that have lost their mountains, and general wreck and ruin. One might fancy that at the end of creation, when the universe itself was completed, all the chips and fragments and débris in general were hurled into the Tonto Basin, — only that, of course, the universe was never "made," but is always in the making; only that the physical configuration of the entire earth is always in process of transformation into new aspects, and nowhere is this progress of the ages more extraordinarily in evidence than in Arizona.

Leaving the Petrified Forest for the Grand Cañon, one has a wonderful journey of six hours to Williams, and thence three hours over the branch road to Bright Angel, where the new and magnificent hotel, "El Tovar," captivates the travellers, and from which a stage runs to Grand View, thirteen miles away, where Vishnu Temple, the Coliseum, Solomon's Temple, and other wonders of the marvellous sandstone architecture, in the depths of the Grand Cañon are viewed.

In waiting for the train on the branch road running from Williams to the Grand Cañon over the beautiful

San Franciscan mountains, the hour of waiting at Williams is made a delight by a most unique and interesting curiosity shop under the splendid Harvey management, where all kinds of natural curiosities and Indian and Mexican things are shown. The walls are hung with bright-hued blankets and rugs, the ceiling is decorated and draped, easy-chairs and sofas abound, and these tend to make the journey a kind of royal progress.

In 1540 Pedro de Tovar, one of the officers who accompanied Coronado through his great expedition, passed through Arizona. Even then an extinct civilization was already old. The ruins of the dwellings of those prehistoric people abound near Flagstaff. In the recesses of Walnut Cañon there are found cliff-dwellings in great numbers. "Some of these are in ruins, and have but a narrow shelf of the once broad floor of solid rock left to evidence their extreme antiquity. Others are almost wholly intact, having stubbornly resisted the weathering of time. Nothing but fragments of pottery now remain of the many quaint implements and trinkets that characterized these dwellings at the time of their discovery.

"Fixed like swallows' nests upon the face of a precipice, approachable from above or below only by deliberate and cautious climbing, these dwellings have the appearance of fortified retreats rather than habitual abodes. That there was a time in the remotest past when warlike peoples of mysterious origin passed southward over this plateau is

generally credited. And the existence of the cliff-dwellings is ascribed to the exigencies of that dark period when the inhabitants of the plateau, unable to cope with the superior energy, intelligence, and numbers of the descending hordes, devised these unassailable retreats. All their quaintness and antiquity cannot conceal the deep pathos of their being, for tragedy is written all over these poor hovels hung between earth and sky. Their builders hold no smallest niche in recorded history. Their aspirations, their struggles, and their fate are all unwritten, save on these crumbling stones, which are their sole monument and meagre epitaph. Here once they dwelt. They left no other print on time."

Flagstaff is a pleasant mountain town some seven thousand feet above sea level, and is particularly fortunate in being the site of the Lowell Observatory, founded by Professor Percival Lowell of Boston, which brings eminent astronomers and scientists to the place. In the Lowell Observatory some of the best work in modern science is being accomplished, and Professor Lowell and his staff have for some years been devoting themselves to the special study of Mars. Flagstaff was selected for the site of the observatory on account of the singularly clear and still air of Arizona. It is an atmosphere almost without vibration. Never were distances more curiously deceiving to the eye than in Arizona. A point that is apparently only a few yards away may be, in reality, at a distance of two miles. Professor Lowell and his staff have, therefore,

exceptional facilities for their work, and Mr. Carl Otto Lampland, the stellar photographer of the staff, has taken impressions of Mars that seem to leave little doubt in the minds of experts that canals on that planet reflect themselves by the camera. This achievement is recognized by astronomers everywhere as marking an epoch in the study of Mars and as fairly closing the argument regarding the possibility of canals on that body by bringing their construction there as an unquestionable fact. It was Schiaparelli, the Italian astronomer, who first observed what he believed were canals on Mars. His report was received with incredulity; but his theory has been so reinforced and supported by actual results of observations since then that it is now generally accepted. Early in the decade of 1880–90 Professor Lowell began a special study at Flagstaff with his fine twenty-four-inch telescope, but it was in May, 1905, that the first results of real significance were obtained.' The light about Mars is said to be faint, and the vibrations in the air, though less in Arizona than is usual elsewhere, still produced disturbing effects on the plate. It is said that Mr. Lampland overcame this difficulty after a long series of experiments, "by using a diaphragm on the telescope, cutting down the aperture from twenty-four inches to twelve inches, as a rule. Though this diaphragming of a photographic lens is not new, this was the first time it was applied to a glass as large as twenty-four inches in diameter and for such faint objects. Hitherto astronomers have

been more concerned with availing themselves of the light-gathering power of the large lenses. It was a distinct advance, and is the one step to which the largest share of the credit is due of successfully photographing the canals."

In the vestibule of the Institute of Technology in Boston were shown in the spring of 1906 a number of these photographs. To the uninitiated they merely presented a black ground with white lines faintly defined. Professor Lowell says that the special significance of the photographs lies in the fact that they corroborate the results shown by other photographers of Mars, and that they also corroborate the methods. That the sensitive plate of the camera will record a star never visible through even the strongest glass, and thus prove its existence, is a wonderful fact in stellar photography.

Cañon Diablo is one of the volcanic phenomena of Arizona, — a narrow chasm some two hundred and fifty feet deep, several miles long, and five or six hundred feet wide, which the Santa Fé road crosses on a wonderful steel spider-web bridge a few miles before reaching Flagstaff. It is one of the curious things for which the tourist is watching. For so intensely interesting is the entire journey westward after leaving La Junta in Colorado, that the traveller who realizes the wonderland through which he is passing is very much on the alert for the landscape.

Between Adamana and Flagstaff is a strangely interesting country. Here is Meteorite Mountain, where evidently

a huge meteor fell into the earth with terrific force, upheaving all the surrounding crust and thus producing a mountain with an enormous cavity in its centre. For five years men have been digging here to find the meteor. They have excavated huge fragments of it. The vast hollow crater where the meteorite is supposed to have fallen into the ground is a mile wide. In some fragments of the meteor which were submitted to Sir William Crookes for examination that great scientist found diamonds in small but unmistakable quantities.

The Meteorite Mountain is situated not more than ten miles south of Cañon Diablo, from which station the traveller may drive to this phenomenal cavity. Within recent months shafts are being projected into the earth to discover, if possible, whether the meteoric theory is the true one. More and more, with every year, is science undertaking to "pluck out the heart of the mystery" in this problematic Arizona. Prof. G. K. Gilbert, of the United States Geological Survey, has made a special study of this phenomenon, and it is he who experimented with a magnetic test, assuming that if an enormous meteorite had hurled itself into the earth until it was buried past excavation, the great mass of metallic iron would still respond to the test, and furnish unmistakable proof of its presence if subjected to magnetic attraction. A scientific writer who has recently made a study of Meteorite Mountain thus reports the conditions:

"The mountain is about two hundred feet high, and there are a few stunted pines about its forbidding looking slopes. Going to the top of this mountain, over huge masses of strange-looking rock, one will find a great depression, generally called the crater, though there are no evidences of its volcanic formation. This crater is a huge bowl one mile across and six hundred feet deep. The winds of the desert have blown much sand into the crater, evidently covering the bottom of the depression to a depth of many feet. There is a level space of about forty acres in the bottom of the crater.

"When the gigantic meteor fell hissing into the earth, if it ever did so, the concussion must have been terrific. And in this connection it is interesting to note that the Indians near by have a legend about a huge star falling out of the heavens and dazzling the tribe with its brightness. Then there was a great shock and sudden darkness, and ever since then the Indians have regarded Meteorite Mountain with awe. Some idea of the action of the meteorite can be obtained by throwing a stone into the mud. When the meteorite buried itself far into the earth the sides were heaved up, leaving a rim-like circle about the depression. As the meteorite sank into the earth it must have crushed layers of red sandstone and limestone. It is believed that the white sand found in the crater and on the sides of the mountain is from the sandstone pulverized by the meteor in its descent. This sand was blown skyward and afterward settled down on the mountain, covering it thickly. No sand like it is to be found near the mountain.

"Men searching the ground surrounding the mountain for a distance of several miles find small meteorites. Several of these weigh as much as one thousand pounds, and others weigh only a fraction of an ounce. The largest pieces were found furthest from the mountain. These meteorites have been proved to be practically non-magnetic. This may explain why the immense body of iron in the buried meteor has not shown any magnetic properties. Needles taken to the mountain have not shown the presence of any great magnetic attraction, and this fact puzzled scientists until it was found that the fragments found near the mountain did not possess magnetism.

"Another interesting discovery is the presence of what is called 'iron shale' near the mountain. These are fragments of burned or 'dead' iron. They might have been broken from the meteorite at the time of the terrific impact, or they might have been snapped from the larger body owing to a sudden cooling process. Inasmuch as the Cañon Diablo country was at one time an immense inland sea, another interesting theory has been brought forth, — that the meteor fell into this sea, and that the great number of splinters of iron in the neighborhood were caused by the sudden cooling of the molten mass. It has been discovered that these small meteorites contain diamonds."

In the immediate vicinity of Meteorite Mountain several tons of meteoric fragments have been found of which Prof. George Wharton James has one, weighing about a ton, on his lawn at his charming residence in Pasadena.

There are also found in this vicinity large amounts of shale which scientists pronounce analogous to the meteorite, but "dead"; yet this shale is highly magnetic and possesses polarity, — one of the most mysterious and incomprehensible properties of electricity.

Professor Gilbert did not meet success when he tried the magnetic test, and in discussing this matter in an address on "The Origin of Hypotheses," delivered before the Geological Society in Washington last year, he said:

"Still another contribution to the subject, while it does not increase the number of hypotheses, is nevertheless important in that it tends to diminish the weight of the magnetic evidence and thus to reopen the question which Mr. Baker and I supposed we had settled. Our fellow-member, Mr. Edwin E. Howell, through whose hands much of the meteoric iron had passed, points out that each of the iron masses, great and small, is in itself a complete individual. They have none of the characters that would be found if they had been broken one from another, and yet, as they are all of one type and all reached the earth within a small district, it must be supposed that they were originally connected in some way.

"Reasoning by analogy from the characters of other meteoric bodies, he infers that the irons were all included in a large mass of some different material, either crystalline rock, such as constitutes the class of meteorites called 'stony,' or else a compound of iron and sulphur, similar to certain nodules

discovered inside the iron masses when sawn in two. Neither of these materials is so enduring as iron, and the fact that they are not now found on the plain does not prove their original absence. Moreover, the plain is strewn in the vicinity of the crater with bits of limonite, a mineral frequently produced by the action of air and water on iron sulphides, and this material is much more abundant than the iron. If it be true that the iron masses were thus embedded, like plums in an astral pudding, the hypothetic buried star might have great size and yet only small power to attract the magnetic needle. Mr. Howell also proposes a qualification of the test by volumes, suggesting that some of the rocks beneath the buried star might have been condensed by the shock so as to occupy less space.

"These considerations are eminently pertinent to the study of the crater and will find appropriate place in any comprehensive discussion of its origin; but the fact which is peculiarly worthy of note at the present time is their ability to unsettle a conclusion that was beginning to feel itself secure. This illustrates the tentative nature not only of the hypotheses of science, but of what science calls its results.

"The method of hypotheses, and that method is the method of science, founds its explanations of nature wholly on observed facts, and its results are ever subject to the limitations imposed by imperfect observation. However grand, however widely accepted, however useful its conclusions, none is so sure that it cannot be called into question

by a newly discovered fact. In the domain of the world's knowledge there is no infallibility."

Sir William Crookes has been deeply interested in the phenomenon of Meteorite Mountain, which must take rank with the Petrified Forests and even with the Grand Cañon as one of the marvels of Arizona. The meteoric shower which seems to have accompanied the falling of the huge meteorite — if the theory of its existence is true — has recorded its traces over a radius of more than five miles from the crater-like cavity. The experiment of Dr. Foote is thus described:

"An ardent mineralogist, the late Dr. Foote, in cutting a section of this meteorite, found the tools were injured by something vastly harder than metallic iron, and an emery wheel used in grinding the iron had been ruined. He examined the specimen chemically, and soon after announced to the scientific world that the Cañon Diablo Meteorite contained black and transparent diamonds. This startling discovery was afterwards verified by Professors Friedel and Moissan, who found that the Cañon Diablo Meteorite contained the three varieties of carbon, — diamond (transparent and black), graphite, and amorphous carbon. Since this revelation the search for diamonds in meteorites has occupied the attention of chemists all over the world.

"Here, then, we have absolute proof of the truth of the meteoric theory. Under atmospheric influences the iron would rapidly oxidize and rust away, coloring the adjacent

soil with red oxide of iron. The meteoric diamonds would be unaffected and left on the surface to be found by explorers when oxidation had removed the last proof of their celestial origin. That there are still lumps of iron left in Arizona is merely due to the extreme dryness of the climate and the comparatively short time that the iron has been on our planet. We are here witnesses to the course of an event which may have happened in geologic times anywhere on the earth's surface."

In this desert plateau of dull red sandstone worn by the erosion and the storms of untold ages, does there indeed lie a submerged star? And if there does, buried so deep in the earth as to elude as yet all the research of science, what force projected it, "shot madly from its sphere," into the desert lands of Arizona? To visit these extraordinary things — the Petrified Forests, the Meteorite Mountain, the Grand Cañon — is to feel, in the words of the poet, —

"These are but seeds of days,
Not yet a steadfast morn,
An intermittent blaze,
An embryo god unborn.

. . . . .

I snuff the breath of my morning afar,
I see the pale lustres condense to a star:
The fading colors fix,
The vanishing are seen,
And the world that shall be
Twins the world that has been."

Not the least among the phenomena of Arizona is that Emerson, who never saw the Great West, should have left on record in his poems the lines and stanzas that seem as if written from personal familiarity with its unspeakable marvels of scenic and scientific interest.

CHAPTER X

LOS ANGELES, THE SPELL-BINDER

"This is the land the sunset washes,
These are the banks of the Yellow Sea;
Where it rose, or whither it rushes,
These are the western mystery!

"Night after night her purple traffic
Strews the landing with opal bales;
Merchantmen poise upon horizons,
Dip, and vanish with fairy sails."

EMILY DICKINSON

"In what ethereal dances!
By what eternal streams!"

Los ANGELES, "the City of the Angels," is invested with the same poetic suggestion in its name as that which surrounds Santa Fé, — "the City of the Holy Faith." A terraced street is known as "Angel Flight." Any retrospective contemplation of Los Angeles gives one the sensation of having been whirled through the starry immensities of space. During even a brief stay one afterward discovers by the unerring logic of mathematics that within a few days he has perhaps travelled some four hundred miles by the electric trolley cars, besides his motor-car journeys when shot through space from old San Gabriel to the

Pacific Coast, or from Elysium Park to Hollywood, and far and away on the opposite side of the city. Were one caught up in an aëro-car, journeying far above the clouds for ten days, it could hardly seem more unreal. One can only think of Los Angeles as the City of Vast Spaces. The town has laid out all the surrounding country, one would fancy, in beautiful tracts (there are over four thousand), each tract containing several acres, — laid out under alluring names, with streets, sidewalks, and lamp-posts.

The "boom" is something tremendous. Companies and corporations run free electric cars to points forty miles out of town, as Redondo Beach and other localities, for people to inspect the lots offered, — lots at prices from "four dollars down, and four dollars a month," with the entire cost from ninety dollars up to that of several hundred. If all the world is not supplied with homes it is not the fault of enterprising Los Angeles. The incomparable electric trolley system renders the entire region within fifty miles around eligible for city privileges. People think nothing of going thirty, forty, even seventy-five miles by the "express electrics." Over an area of a thousand miles in length and perhaps one hundred and fifty in width there is scattered a population less than that centred within city limits in Chicago. The world is wide — in Southern California. There is nothing of the dreamy,

languorous old Spanish atmosphere in Los Angeles. It is the most electrically up-to-date city imaginable. The city limits comprise over twenty-eight thousand acres. The streets are paved and oiled; the lighting is wonderful, most of it being done from tall towers rather than ordinary lamp-posts. Not even New York has any street or avenue so illuminated by night as is Broadway in Los Angeles, where, as in the boulevards in Paris, one can easily read by the street lights. Los Angeles has twenty-one great parks and innumerable hills and valleys in the residence regions. This diversity affords natural facilities for landscape gardening which are utilized with fine effect. Spacious boulevards, artificial lakes, and series of terraces everywhere enchant the eye, seen amidst the bewildering luxuriance of creamy magnolia blossoms and the graceful pepper tree.

The enterprise of Los Angeles is equalled by the refinement and culture of the people, and the schools, churches, libraries — the social life — all reveal the best spirit of American institutions.

That this is one of the spellbinding cities goes without saying. Everything is in gleam and glitter and glow. The electric car and the telephone system are here developed to a higher degree than perhaps in any other Western city except Denver. The growth of Los Angeles is something fairly incredible. A leading park commissioner, Dr. Lamb, has described the beauty of the four thousand tracts of land (each tract comprising many

acres), all laid out, ready for buyers and builders. Of the twenty-one parks, one comprises more than three thousand acres, and another, Elysium Park, over eight hundred acres of hills and valleys already decoratively laid out with terraced drives and beautiful shrubs, flowers, and artificial lakes. The trend of the city is rapidly toward the ocean, some fifteen to twenty miles away, and it can hardly be five years before from Venice and Santa Monica, on the coast, to Pasadena, ten miles to the east of Los Angeles, there will be one solid city, one vast metropolis of the Southwest. The public library is ably administered, and it is one of considerable breadth of resources, with the advantage of having for its librarian Mr. Charles F. Lummis, the well-known writer on the Southwest. Madam Severance, who in 1878 founded the Woman's Club, a large and influential association of which for many years she was the president, and Mrs. Rebecca Spring, the friend of Margaret Fuller, are two Boston women who have transferred their homes to Los Angeles and whose lives emphasize Emerson's assertion that it is the fine souls who serve us and not what we call fine society.

The rush and the brilliancy of life in all this Los Angeles region transcend description. Broadway has more than two miles of fine business blocks, the architecture being restricted to some eight or nine stories. The beautiful parks, with their artificial lakes, their

date-palm trees, their profusion of brilliant flowers, attract the eye. There are residence sections of exceeding beauty, — the lawns bordered by hedges of rosebushes in full bloom and perhaps another rose hedge separating the sidewalk from the street.

From the high plateaus of Northern Arizona to the blossoming plains of California is a contrast indeed. In Arizona these thousands of acres need only irrigation to become richly productive. The climate is delightful, for the elevation — over seven thousand feet — insures coolness and exhilaration almost every day through the summer. But at present there seems no conceivable way to procure water with which to irrigate. In California precisely the same land is irrigated and has also the advantage of a rainy season, and the vegetation and fruits abound luxuriously. Orange groves, with the golden fruit shimmering on the trees ; lemon groves, olive orchards, and the avenues and groves of the eucalyptus tree make fair the landscape. An important industry here is that of lima beans. Tracts of fifteen hundred acres sown with these are not unusual, and the crops are contracted for by Russia and Germany almost as soon as sown. On one of these it is said that the owner had made a princely fortune within two years. The creation of the city in imagination is in great favor. Vast tracts of country from one to ten miles outside the city limits are staked out, as before noted ; avenues and streets defined

and named, lamp-posts erected, an attractive name given the locality, and lots are offered for sale from perhaps four or five hundred dollars up, on the terms of "fifty dollars down and ten dollars a month."

The trolley-car service in and around Los Angeles is said to be the best in the world. To Venice and Santa Monica, on the beach, — at a distance of some seventeen miles, — there are electric "flyers" that make the trip within thirty minutes. Venice is a French Étretat. The little rows of streets at right angles with the coast line, running down to the water, are named "Rose Avenue," "Ozone Avenue," "Sunset Street," and other alluring names. This Venice is a veritable (refined and artistic) "Midway," with its colonnades of shops offering every conceivable phase of trinkets and *bijouterie;* its concert halls, casino, gay little restaurants, and every conceivable variety of amusement. It is the most unique little toy town of a creation conceivable, and the electrical display and decorations at night are fascinating in their scenic effect.

Santa Monica, some two miles farther up the coast, is still, stately, and poetic. Here the blue Pacific rolls in in the most bewildering sea greens and deep blues, and over it bends a sky rivalling that of Arizona in depth and richness of color. The entire Pacific Coast is an idyl of landscape loveliness.

But of life. What are the people of this lovely young

city of two hundred thousand inhabitants doing and thinking? It is not a question to be answered in a paragraph. Life here is intense, interesting, full of color and movement, and its many-faceted aspects invite consideration. As one sits, for instance, on a Pasadena piazza, with the golden glory of the sunset seen over the Sierra Madre, and the rose hedges, the orange groves, the great bushes of heliotrope that are almost like young trees pouring out their mingled fragrance on the evening air, one falls under its spell. As the twilight deepens into darkness the great searchlight from Mount Lowe, directly in the foreground, a picturesque panorama, may swing out with its weird, sweeping, dazzling illumination over the scene. When this searchlight is out, people at the far-away beaches can see to read by it at distances of from twenty-five to fifty miles. Quite near Mount Lowe — one of the adjacent peaks — is Mount Wilson, on which the new Carnegie Observatory is to be located. This will be fitted with the largest telescope in the world and will have the advantage of every latest scientific appliance.

Pasadena, like all the California towns and cities, covers very large tracts of country. There is a thriving business centre, not very far from which are the great Raymond Hotel and other winter resorts for the throngs of tourists who are almost as important to the revenues of California as they are to Italy. There are both North and South Pasadena, — each almost a separate city in

itself, — and the most beautiful street is Orange Grove Avenue, with large estates on either side and spacious lawns. On Fair Oaks Avenue, in a pretty cottage, lives Prof. George Wharton James, the famous explorer, scientist, and notable writer on the Grand Cañon in Arizona, — and the greatest interpreter, indeed, of the entire Southwest. The books of Professor James, "In and Out of the Old Missions of California," "The Indians of the Painted Desert," and "Indian Basketry" (besides his book on the "Grand Canyon," which is the accepted authority), interpret the many phases of life in the Southwest in a vivid and accurate manner, rendering them invaluable to contemporary literature. Professor James makes his original explorations, taking with him an assistant and his own camera, and going through varied hardships, almost greater than could be realized. In the vast desert spaces, remote from any human habitation, he has had to swim large, muddy, inland lakes, where vermin were swarming; to go without food and water, and to endure the intense fatigue of long tramps. In perusing his books the reader little dreams at what fearful cost of energy all this original material was obtained. In his home Professor James has a most interesting collection of the *objets d'art* of the Southwest. One must travel over this part of the country in order to appreciate them. They are as distinctive of New Mexico, Arizona, and Southern California as the old

masters and other phases of Italian art are of Italy. There are brilliant Navajo blankets and rugs — soft, rich, and vivid in color, with curiously decorated designs; the most interesting array of Indian pottery — the many specimens from the old tombs being far finer than any pottery done by the modern Indians; and at the entrance to his lawn Professor James has a huge meteorite from Meteorite Mountain in Arizona, which weighs over a ton. He has a large section of a tree of the Petrified Forest, and the finer specimens that show the bark and the fibre, and also the crystallization. His library is large and fine, and comprises many autograph gift copies from other authors.

One feature of the life of Professor James is especially helpful. In his spacious library upstairs, on every Thursday evening, he gives an informal talk on his travels and explorations to his friends and neighbors. His personal experiences in studying the phenomenon of the Salton Sea and the vagaries of the Colorado River, which is a law unto itself, are most interesting.

The call of the wild is not more irresistible than the call of the desert to Professor James. He has lived on it and with it, and learned to read its hieroglyphics. The desert spirits have companioned him. He has explored vast spaces of the Grand Cañon; he has encamped, day after day, even week after week, on the Painted Desert; he has wandered in the grim strange Tonto Basin, and

sailed (of late) the Salton Sea, — this sheet of four hundred square miles of water, this impromptu lake where but a little while before was a deserted hollow of a long extinct volcanic sea. Nature leads man a pretty dance out in this Land of Enchantment. No one would venture to prophesy at night just what stage transformation might take place before morning. This very uncertainty of any particular tenure of mountain, sea, or desert perhaps tends, unconsciously, to so react upon the population that their more real life is thrown forward into the future. For instance, Los Angeles lays no particular stress upon her present population, but announces that by 1910 the figures will undoubtedly reach the half-million mark. Nor, indeed, can the observer doubt this in any contemplation of the present incredible rapidity of progress in every direction. The city seems half made up of millionnaires, and the latest municipal bank clearings amounted to almost four hundred millions of dollars. Los Angeles is really an exotic, for the latest census reveals the astonishing fact that ninety per cent of its inhabitants are from the East, leaving only ten per cent as native Californians. Never was the advertising of a city carried out to the degree of being fairly a fine art so wonderfully as in Los Angeles. In the Chamber of Commerce there is a perpetual exhibition of fruits and flowers in season, and of the products and manufactures of the country.

Los Angeles, like most of the other more important

Western cities, is deeply concerned with irrigation schemes. This region of California supplements its rainfall with irrigation, and between the two the whole country is in bloom and blossom. Los Angeles is now arranging a gigantic scheme to bring water from the Owen's River, two hundred miles away, by means of tunnels through mountains and a huge canal. This fall of water will not only entirely supply the city with water power of immense force and volume, but it is estimated that it will also irrigate a hundred thousand acres. The scheme will employ five thousand men for some four years, and it is estimated that the cost will be twenty-five millions. No undertaking daunts the Western city. If an enterprise is desirable, it is to be achieved. That is the law and the prophets in the Land of Enchantment.

Los Angeles, like Colorado Springs, is the paradise of excursions. The trip up Mount Lowe to the observatory offers a magnificent panorama of landscape, including Pasadena Valley and Catalina and Santa Barbara islands. Old San Gabriel Mission and the San Gabriel Valley are infinitely interesting, and the famous bells of San Gabriel still ring in their quaint, rude stone framework even though they are jangled and out of tune with the lapse of years. The Sierra Nevada Mountains rise from the San Gabriel Valley.

One of the excursions has a feature that is new to every visitor, — that of glass-bottom power boats which give a view of the marvels of the ocean. These boats run from

Avalon on the coast — an hour's express trolley ride from Los Angeles — to the submarine gardens adjoining Catalina Island, and they have a capacity to seat over a hundred passengers around the glass. In sailing over these submarine gardens the boats move very slowly, that the passengers may enjoy the view of the strange seaweed, the marine flowers, the varied aquatic vegetation. Catalina Island is a favorite sea resort, lying in such convenient proximity to the city.

Los Angeles seems to be the paradise of every one who has a new idea — or ideal — for the betterment of humanity. There is an atmosphere of idealism. Among the recent institutions is the Pacific School of Osteopathy, with a faculty of thirty physicians, men and women, who base their therapeutics on the scientific fact that the body is subject to chemical, electrical, thermal, mental, and mechanical treatment. In the line of ethics Rev. B. Fay Mills has established a comprehensive movement of "Fellowship," including religious services and social intercourse, with a large and enthusiastic membership drawn by this eloquent orator and preacher who for many years before in his pastorate in Boston preached to large congregations who gave him profound appreciation.

A most important centre that radiates sweetness and light in infinite measure is that of Christ Church (Episcopal), whose rector, Rev. Baker P. Lee, is not only

eminent as a preacher, but as a leader and inspirer of a network of organizations connected with the church for the betterment of human life. Christ Church parish is a large one, numbering over two thousand in direct connection with the church, with a list of communicants of over twelve hundred. Within the past three years the parish has built a magnificent new church and a rectory, and the holy earnestness of the young and gifted rector makes the work one of vital spirituality.

No city can offer more beautiful homes than those of Los Angeles; more attractive parks, more enchanting scenery, or more delightful excursions over a network of electric lines which aggregate above five hundred miles of single track and reach one hundred towns and villages from Monrovia of the foothills to Redondo by the sea. The world has but one Southern California, with its cool, soft, gray sea-fogs in the early mornings, followed by its cloudless days of blue sky over golden sunshine; where the sea-breeze gladly brings its health-giving ozone in exchange for the odors of orange blossoms and roses; where the mountains stand glorying in the ruggedness of their rocky cliffs until, touched by sunset's wand, they glow with pink lights and purple shadows; and over all comes a golden radiance that changes the forbidding outlines of their jagged peaks into radiant beauty, — fitting features of the vast panorama of nature to hold their eternal place in the Land of Enchantment.

CHAPTER XI

GRAND CAÑON; THE CARNIVAL OF THE GODS

"What time the gods kept carnival!"
EMERSON

"The earth grew bold with longing
And called the high gods down;
Yea, though ye dwell in heaven and hell,
I challenge their renown.
Abodes as fair I build ye
As heaven's rich courts of pearl,
And chasms dire where flood like fire
Ravage and roar and whirl.

"Come, for my soul is weary
Of time and death and change;
Eternity doth summon me —
With mightier worlds I range.
Come, for my vision's glory
Awaits your songs and wings;
Here on my breast I bid ye rest
From starry wanderings."
HARRIET MONROE

ONE takes the wings of the morning and arrives at the uttermost parts of the earth to find — the Grand Cañon, the scenic marvel of the entire world.

Only to the poet's vision is the Grand Cañon revealed; only to the poet's touch do its mighty harmonies respond.

For this sublime spectacle is as vital as a drama enacted on the stage, only its acts require the centuries and the ages in which to represent themselves. Whatever one sees of the Grand Cañon, — it matters not from what commanding view of vision or vista, one sees only an infinitesimal point. It is the Carnival of the Gods. "Prophets and poets had wandered here," writes Harriet Monroe, "before they were born to tell their mighty tales, — Isaiah and Æschylus and Dante, the giants who dared the utmost. Here at last the souls of great architects must find their dreams fulfilled; must recognize the primal inspiration which, after long ages, had achieved Assyrian palaces, the temples and pyramids of Egypt, the fortresses and towered cathedrals of mediæval Europe. For the inscrutable Prince of builders had reared these imperishable monuments, evenly terraced upward from the remote abyss; had so cunningly planned them that mortal foot could never climb and enter to disturb the everlasting hush. Of all richest elements they were fashioned, — jasper and chalcedony, topaz, beryl, and amethyst, fire-hearted opal, and pearl; for they caught and held the most delicate colors of a dream and flashed full recognition to the sun. Never on earth could such glory be unveiled, — not on level spaces of sea, not on the cold bare peaks of mountains. This was not earth; for was not heaven itself across there, rising above yonder alabaster marge in opalescent ranks for the principalities and powers? . . .

In a moment we stood at the end of the world, at the brink of the kingdoms of peace and pain. The gorgeous purples of sunset fell into darkness and rose into light over mansions colossal beyond the needs of our puny unwinged race. Terrific abysses yawned and darkened; magical heights glowed with iridescent fire."

If one pauses for a moment with any sense of obligation to himself to gain some *rationale* of this cañon; if for a moment he turn from rhapsody and ecstasy and the dream of poet and painter to grope after statistical estimates, what does he find? One comparison is that, —

"If the Eiffel Tower, which with a height of almost a thousand feet is the tallest structure in the world, were placed at the bottom of the cañon in its deepest part, five more towers just like the first would have to be piled on top of one another to reach the rim of the plateau."

And again:

"Could the cañon be filled in for a building site, it would furnish room enough for fifty New York cities. Indeed, it would have an area of sixteen thousand square miles, equal to the whole of Switzerland, or the states of Massachusetts, Connecticut, Delaware, and Rhode Island combined."

Statistical comparisons are, at best, a necessary evil which, once confronted, need not companion one further. It is beauty, it is sublimity, not mathematical assurances, that really lays hold on life. The inexplicable impressions

made by this spectacle are mirrored in the following words: —

"As I grew familiar with the vision I could not quite explain its stupendous quality. From mountain tops one looks across greater distances and sees range after range lifting snowy peaks into the blue. The ocean reaches out into boundless space, and the ebb and flow of its waters have the beauty of rhythmic motion and exquisitely varied color. And in the rush of mighty cataracts are power and splendor and majestic peace. Yet for grandeur appalling and unearthly; for ineffable, impossible beauty, the cañon transcends all these. It is as though to the glory of nature were added the glory of art; as though, to achieve her utmost, the proud young world had commanded architecture to build for her and color to grace the building. The irregular masses of mountains, cast up out of the molten earth in some primeval war of elements, bear no relation to these prodigious symmetrical edifices mounted on abysmal terraces and grouped into spacious harmonies which give form to one's dreams of heaven. The sweetness of green does not last forever, but these mightily varied purples are eternal. All that grows and moves must perish, while these silent immensities endure."

The majestic panorama dominates every detail of daily life. As when in Bayreuth for the Wagner music-dramas alone, every other consideration is subordinated to these, so in life in El Tovar, on Bright Angel Trail, one's hours

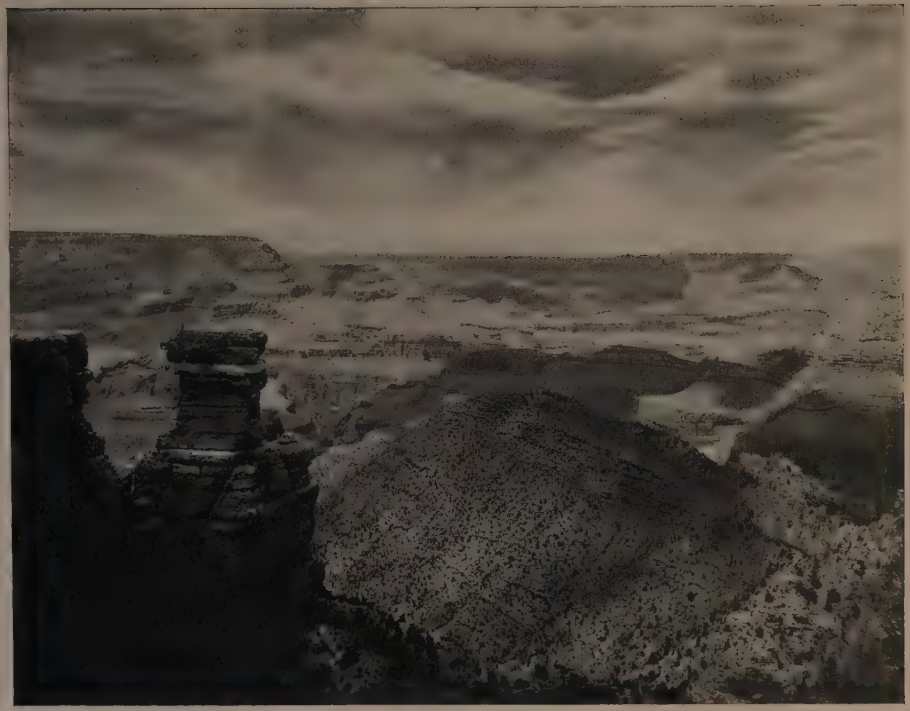
for sleep and for any daily occupations are held strictly amenable to "effects" in the mysterious splendor of the Titanic underworld. To see the cañon under the full moon; to see it when all the pinnacles of rock are leaping in rose-red flame under a sunrise; to see it in a dream of twilight as the purple canopy falls, — all these hours, — all hours are made for the magical transformations. With every breath of change of the atmosphere this celestial beauty changes. One is hardly conscious as to the special ways and means by which he finds himself in an enchanted world, —

"From the shore of souls arrived?"

It is very possible. Nor does he know how — or when — he shall depart. The past is effaced, and the future recedes into some unformulated atmosphere. Life, a thousand lifetimes, concentrate themselves in the present. A supreme experience has always this peculiarity, — that it bars out all the past and all the future. When one is on the Mount of Transfiguration, he is not scrutinizing the pathway by which he came nor that by which he may descend.

Even if one has seen the Grand Cañon before, he is surprised to find how absolutely newly created it is to him when its haunting magic draws him back. No enshrined memory can compare with the reality. In seeing the Petrified Forest one checks it off as a thing accomplished

for life. It is definite. The great logs of agate and jasper and chalcedony lie on the ground as they have lain for perhaps thousands of ages. It is a wonder — the seventh wonder of the world, if one pleases — and the paradise of geologists, but it is unchanging. Not so the Grand Cañon. The cañon is a perpetual transformation scene. Its color effects rival those of an electric fountain under the full play of the spectroscope. It is rose, purple, amber, emerald, pearl gray, pale blue, scarlet — according to atmospheric states. One leaves it in the late afternoon with the rocky towers and pinnacles and battlements all in glowing scarlet, seen through a transparent air. He steps out upon the broad hotel piazzas an hour later and, behold, the uncalculated spaces of the cañon are filled with a half-transparent blue mist which envelops all the curious sandstone formations that gleam in pale rose and opal tints through this thin blue mist, and assume wraith-like shapes. Major Powell well said, that really to see the Grand Cañon, a year is necessary. Yet just as truly may it be said that even for two days it is worth crossing the continent to enjoy this most marvellous of spectacles. Only the scientist and the specialist dream of seeing it in anything like completeness. For the tourist and traveller a range of twenty miles is quite sufficient to disclose its representative beauty. A day's drive by the stage to Grandview Point, Hance's Trail, and Moran's Point is easily made between nine and five o'clock.



GRAND CAÑON, FROM GRAND VIEW POINT

A drive of two or three miles in the opposite direction will include Rowe's and O'Neil's points. One day will allow the adventurous tourist to "go down the trail." Still, after doing all these things, the best of all, it may be, is to live into the atmosphere. To draw one's chair out on the broad balcony of the new and beautiful hotel, El Tovar, and sit and dream and gaze and wonder, and wonder and gaze and dream, is, perhaps, the greatest joy one can have in all the time passed here, especially if the solitude can be the solitude *à deux*. No joy, no interest, is of much consequence until or unless it is sympathetically shared. As a *décor de scène* the Grand Cañon is unrivalled. The magic and mystery of all the universe broods over its Titanic spaces.

The air is the most bracing, exhilarating, and exquisite imaginable. The great rolling mesas covered with pine forests are more than seven thousand feet above the sea, and their exhilarating and tonic properties are beyond description. The entire atmosphere is fragrant with the pines. Throat and chest are bathed in balm and healing. There can hardly be any difficulty with the bronchial and breathing mechanism that cannot find its cure here. And the charm, the utter enchantment of living on this rainbow-tinted cañon, a mile and a half deep, thirteen miles across at this "Bright Angel" point (and this is its narrowest place), the joy of life is to steep one's self in the atmosphere of enchanting loveliness;

and this perpetual play of color is an experience that finds no interpretation in language.

On first alighting from the branch of the Sante Fé that runs from Williams, Arizona, to Bright Angel, at the head of Bright Angel Trail on the Grand Cañon, — a three hour's ride of transcendent beauty among the purple peaks of the San Francisco mountains, — on first stepping from the train up the terrace to the beautiful "El Tovar" built on the very rim of the cañon, one objects strenuously to entering the hotel. His eye has caught the Vision, — a "celestial Inferno bathed in soft fires?" or the "Promised Land?" or the mystical vision that John saw on the Island of Patmos? The hotel would, presumably, remain; but this spectacle, — what can it be save a mirage, one never seen before on earth and perhaps not to be too confidently anticipated in Paradise? Would such a picture remain? Can one safely leave a sunset which is all a miracle of splendor while he goes in to dine? Can he safely turn away from the heavens when a young moon at night is winging her way down the sky and expect to find her midway in the heavens? And could one safely leave this most marvellous scene of all while he should bestow himself in his rooms?

> "Would the Vision there remain?
> Would the Vision come again?"

Could it be, in the very nature of things, any more permanent than any other momentary revelation of an en-

ZIGZAG, BRIGHT ANGEL TRAIL, GRAND CAÑON, ARIZONA

chanted hour that would fade into the darkness as night came on, like the splendor of a sunset, the color-scheme of a rainbow, or the glory and the freshness of a dream?

Instead, the Grand Cañon prefigures itself to one as an apparition, and while he may gaze upon it under all changing lights of dawn, of noonday, of sunset — and of moonlight — he cannot come to any realization that it is there all the time. His room in the hotel may look out into it and over it; and, waking in the night, he rises and leans out of his window to see if it is still there. One does not expect a vision of the New Jerusalem, a palpitating, changing, flaming, throbbing sea of color — in its rose-reds, its greens, its amber, gold, and purple — to remain like a field or a forest. It seems a thing of conditions, visible at one moment, vanished, perchance, the next.

Think of a chasm a mile and a half deep, from thirteen to eighteen miles wide, and as long as from Boston to New York — two hundred miles! Think of it again as not merely a deep, dark chasm, but as filled with the most wonderful architectural effects in the sandstone formations which simulate Chinese pagodas, temples, altars, cathedrals, domes, and towers so perfectly that one is incredulous of the fact that their shaping is nature's work alone. Add to this the color scheme, now an intense royal purple, again flashes of rose and green and ivory and a rare blue; or again a "nocturne" in silvery

gray, with hints of lingering rose and amber shimmering in the air. Until within a few years the Grand Cañon was so inaccessible as to quite account for the general ignorance of this most wonderful scenic phenomenon in our country, and, indeed, with no exaggeration be it said, the most wonderful in the entire world. Twenty Yosemites might be thrown into it and make no impression; and as for Niagara, it would be a mere tiny waterfall in comparison.

In the trail leading downward into the cañon the first level is just five times the height of St. Peter's in Rome, or the Pyramids of Cheops.

From the brink one looks down a mile and a half into towers and pinnacles; one looks across eighteen miles in the widest place; and one looks up and down its tortuous length, as its complicated system of cañons revealed themselves as far as the eye could see either way. One gazes, not into a deep, dark cleft, a Titanic royal gorge, but on and into a sea of color and a wealth of architectural wonders, — cathedrals, towers, mosques, pinnacles, minarets, temples, and balconies exceeding in variety of design, in extraordinary beauty of grouping and splendor of color, anything of which one could dream, even in his most enchanted moments. The red sandstone, the brilliant white of the limestone luminous under the setting sun, the green of pine trees or of copper rocks, the gray and ochre tints of gravel and fallen rocks and débris,

A CLIFF ON BRIGHT ANGEL TRAIL, GRAND CAÑON

the soft, deep purple mist enveloping all as an atmosphere in which all these architectural marvels seemed to swim — the strange, unearthly splendor of it all — holds one under a fascination that can neither be analyzed nor described. This, then, is "El Grande Cañon de la Colorado." One stands speechless, breathless, as if transported to some other planet. Suddenly all life — everything that floated in memory — seemed confused, unreal. Was the past (whose running series of incident and event and circumstance already seemed vague) a dream, and was this the reality? Or had there never been any reality in life before? Was this a dream, wrought under some untold spell of enchantment? Would one hear the water nixies chanting their refrain if he listened? Or was this scene of Titanic grandeur the abode of Wagner's gods and heroes? One watched for the sacred fires to flame on Brunhilde's rock and for Siegfried to appear. One saw the ship which had borne Tristan on his ill-starred voyage, and the garden where the lovers confessed their intense and instant love, and the fatal potion scene rises before him; and again he is lost in rapt ecstasy as the air seems filled with the passionate drama of Lilli Lehmann and Alvarez. For let Ternina and other younger women come and go in the Wagner music-drama, and yet where will that absolute perfection of dramatic action, that passionate exaltation of emotion, ever again attend and invest any singer as they invest and are identified with Lilli Lehmann?

"The Fairest enchants me,
The Mighty commands me."

In this most sublime of all earthly spectacles there are aërial landscape effects as delicate and evanescent as a cloud-wreath, or as a fog that advances, wraith-like, to melt away into dissolving views. "The region is full of wonders and beauties and sublimities that Shelley's imaginings do not match in the 'Prometheous Unbound,'" wrote Charles Dudley Warner.

If the world realized the marvellous effects of this very Carnival of the Gods, the infinite spaces of the Grand Cañon itself could not contain all who would eagerly throng to behold it. The statistical record of the increase of visitors is rather interesting. In 1900 there were eight hundred and thirteen; the succeeding year, six thousand eight hundred and eighty-three; while in 1903 the number increased to nearly one hundred and twenty-eight thousand. Since that date the number of visitors has multiplied itself after the fashion of compound interest. The establishment of all the conveniences and comforts, not to say luxuries, of modern travel may be one of the most potent factors in this increase of visitors. Until within five years the Grand Cañon could only be reached by a stage ride of seventy miles through the Coconino Forest, — whose dim gray twilight reminds one of the forests of Fontainebleau, — and which drive, however romantically beautiful, was attended with too great terrestial

discomfort to commend it to general public service. Until 1906 the hotel accommodations, also, while offering a modest comfort, were essentially primitive ; while now the superb new Harvey hostelry, " El Tovar," built at a cost of a quarter of a million dollars (and the Harvey name is a synonym in the West for everything admirable in dining cars, refreshment stands, and hotels), insures to every traveller any degree of luxurious comfort he requires. Even the man who, after visiting all the enchanted points in the Land of Enchantment, in its prehistoric period of twenty years ago before Pullman cars climbed the mountain peaks and the Waldorf-Astoria type of hotels sprang up, the man who, after a trip through these wonders of the world, returned to New York and declared that he would rather see an electric bell and a bath than all the grandeur between Pike's Peak and the Pacific, would now be fully reconciled to Western sojourns. He would find his electric bell and his bath to be as much a matter of course as in Fifth Avenue, besides also finding that there were spectacles, — as that of the Garden of the Gods, Cheyenne Cañon, the Petrified Forests, the Grand Cañon, and the Los Angeles electric trolley system (which quite deserves to rank with the modern " Seven Wonders " of the world), and which Fifth Avenue by no means provided for her votaries. In fact, " El Tovar " is so inclusive of comfort as to be fairly a feature of the cañon, commanding, on one side, a magnificence of prospect without parallel in the

world in the mighty chasm on whose brink it stands, on the other side the fragrant Coconino pine forest, — the largest belt of pine timber in the United States, and which has been made a government forest reservation.

There is now a project to erect a memorial to Major John W. Powell, the pioneer explorer of the Grand Cañon, to be placed on the rim at the head of Bright Angel Trail at El Tovar. This most fitting plan to honor the name of the great scientist and explorer whose research contributed the first authoritative knowledge of the cañon is the thought of the American Scenic Association, which will petition Congress to grant the requisite appropriation. No monument to human greatness could be more ideally placed than this to perpetually repeat to every visitor and sojourner the name of the explorer who successfully achieved the most startling and heroic journey in all history, — that made through the complete extent of the Grand Cañon.

It was in 1869 that Major Powell, with four boats and nine men, inaugurated this expedition, starting from Green River City in Utah. He was dissuaded and importuned in the most urgent way by those most familiar with the region not to attempt the feat. The Indians especially insisted that no boat could live in any one of the score of rapids to be passed. There was also a tradition that for some hundreds of miles the river lost itself in the earth, and Major Powell and his men would

thus be imprisoned within a Titantic fortress from which escape would be impossible. But men of destiny do not hesitate when they are led to great achievements. Major Powell set out on May 24, 1869, with his nine men and four boats, and landed on August 3, with four men and two boats, at the mouth of the Virgin River, after having sailed the boiling torrent of the Colorado River, at the bottom of the cañon, for more than a thousand miles. Mr. C. A. Higgins characterizes this feat as "the most wonderful geological and spectacular phenomenon known to mankind."

The first authentic knowledge of the existence of the Grand Cañon dates back to August of 1540, when the Spanish friar, Alvar Nuñez, after years of romantic wanderings among the pueblos of the Southwest, returned to Mexico with tales of this mighty chasm. Coronado, who had discovered the Seven Cities of Cibola (of which now only Zuñi remains), ordered Garcia Lopez to take a band of men and Indian guides and search for this chasm, which he succeeded in discovering; with the more difficulty, surely, in that one has to gain its very rim before he has hardly an intimation of its proximity. The spectacle of the cañon always presents itself as a sudden surprise. It was not, however, until 1884 that, by the building of the great transcontinental line, the Santa Fé, the Grand Cañon became accessible. Then for some twenty years it was reached, as has already been noted, by stage from

Flagstaff. Now one can travel in his sleeper without change from Chicago to El Tovar, and thousands of tourists annually visit the extraordinary scene. Not the least of the interesting data regarding the cañon is this gulf of more than three hundred years that divides its discovery from its taking rank as the most phenomenal scenic resort of the world. The mills of the gods grind slowly. The visitors to the Grand Cañon present singularly cosmopolitan groups, there being hardly a country in the world that is not represented at some time during the year.

For the cañon has all seasons for its own. It is almost as much of an object of winter as of summer pilgrimage. One season is found, on the whole, to be almost as enjoyable here as another. It is cool in summer, and it is warm and sunny in winter. Sometimes there is a fairy snowfall, but hardly more lasting than a spring frost, and when it comes it only adds another flitting variety to the stupendous scene.

With untold tons of the water of the Colorado River pouring itself in torrents through the bottom of the cañon, all the water used for the table, for toilet, and for laundry purposes has to be brought from a distance of a hundred and twenty miles, and twenty thousand gallons are in daily use. An electric-light plant furnishes brilliant illumination.

The Hopi House, built in imitation of an Indian pueblo, with a group of quaintly garbed Hopi Indians

within in attendance, is a curiosity; and besides the Hopis there are Navajos and Supais coming to sell their handiwork, — that of pottery, silver ornaments, blankets, and baskets. Cataract Cañon, forty miles from El Tovar, is the home of the Supais, and it is a place that well repays visiting for an entirely new point of view of the vast cañon that it affords. There are peaceful Indians to be seen daily riding their horses through the pine woods, journeying from El Tovar to Grand View, to "Hance's Trail," to "Moran's Point," and other localities, to sell or barter their wares. One old Indian who seems to roam about alone has developed an ingenious manner of procuring food when he is hungry. He enters the hotel office and seeks the proprietor himself, recognizing with unerring instinct that this gentleman's liberal endowment of sympathy and unfailing generosity never permits him to "turn down" a request for aid. The wily old savage seeks him out and makes conspicuous overtures of his affection.

"You is heap my son; pale face heap my son!" the dusky visitor declares, and when this assurance is emphasized to the proprietor he realizes that it means he is "heap my son" because his visitor is hungry. These outbursts of devotion occur only when the old Indian is at his wits' end to know where to procure something to eat. Once fed he is off, and thinks no more of the man whom he assured that he was "heap my son" until hunger again assails him and stimulates his parental affection.

So the little trifles and pleasantries of the *comédie humaine* assert their place in the general life even on the rim of the sublime spectacle of the Carnival of the Gods.

For more than two hundred miles the cañon offers its innumerable panoramas, no one ever duplicating that of another. There are thousands of cañons in it — it is a complicated system of colossal cañons. Every wall is an aggregation of hundreds of walls. Every pinnacle is formed of hundreds of pinnacles. When the sun shines in splendor on the vermilion walls, the glory is almost beyond what man can bear. When from the trail below a star seems to float in the air and rest on the verge of the cliff, what words can convey any image of this ineffable beauty?

The cloud-effects are another of the phases of faëry. A rain creates a panorama of clouds creeping out of one cañon and flying into another, all "as if they had souls and wills of their own," says Major Powell; and he adds, "In the imagination the clouds belong to the sky, and when they are in the cañon the skies come down into the gorges and cling to the cliffs and lift them up to immeasurable heights, for the sky must still be far away; thus they lend infinity to the walls." The cañon mirrors the color and the state of the sky as water does. This is one of the most curious facts connected with it. "Yet form and color do not exhaust all the divine qualities of the Grand Cañon," continues Major Powell; "it is the land

of music. The river thunders in perpetual roar, swelling in floods of music when the storm-gods play upon the rocks, and fading away in soft and low murmurs when the infinite blue of heaven is unveiled. . . . The adamant foundations of the earth have been wrought into a sublime harp upon which the clouds of heaven play with mighty tempests or with gentle showers."

Major Powell, the explorer and practically the modern discoverer of the cañon, remains its most complete interpreter. His journal narrating that remarkable voyage through the Colorado River in a region "more difficult to traverse than the Alps or the Himalayas," is fairly an epic in American literature. He had the vision of the painter and the heart of the poet. He felt that infinitely complex variety of the cañon, and he read its sublime inscriptions on a scroll not made with hands. He pictures one feature especially that has hardly been touched by other writers, — that of the perpetually changing aspects. "One moment as we looked out over the landscape," he writes, "the atmosphere seemed to be trembling and moving about, giving the impression of an unstable land: plains and hills and clifts and distant mountains seemed vaguely to be floating about in a trembling, wave-rocked sea; and patches of landscape would seem to float away and be lost, and then reappear. . . . The craggy buttes seem dancing about. . . . The sun shone in splendor

on the vermilion walls. Shaded into green and gray when the rocks were lichened over, the river filled the channel from wall to wall, and the cañon opened like a beautiful doorway to a region of glory. But at evening, when the sun was going down and the shadows were settling in the cañon, the scarlet gleams and roseate hues, blended with tints of green and gray, slowly changed to sombre brown above and black shadows crept over them from below. . . . Lying down, one looked up through the cañon and saw that only a little of the blue heavens appeared overhead, — a crescent of blue sky with but two or three constellations peering down upon us. Soon I saw a bright star that appeared to rest on the verge of the cliffs overhead, and, as it moved up from the rock, I almost wondered that it did not fall, and indeed it appeared as if swayed down by its own weight. The star appeared to be *in* the cañon, so high were the walls."

So the wonderful story of Major Powell's runs on of these atmospheric phenomena of the cañon, effects that

> " . . . give to seas and sunset skies
> Their unspent beauty of surprise."

It is from Bright Angel Trail that the Grand Cañon is the most accessible. Parties of men and women, mounted on sure-footed burros, go down this trail with their guides — apparently under the special protection of the bright angels of the celestial host, as no accident has ever, thus far, occurred. Prof. George Wharton James notes, in

his invaluable work on the Grand Cañon,[1] that this trail was originally used by the Havasupai Indians and that the rude irrigating canals that conveyed water from an adjacent spring to a so-called Indian Garden in the near vicinity are still to be seen. The view from the head of Bright Angel Trail is one of vast extent and a peculiar sublimity. Buddha Temple is a colossal pile that rises in isolated grandeur, and near it is Buddha Cloister. An impressive tower of rock rising in the cañon bears the honored name of Agassiz. Isis Temple and the Temple of Brahma are within the range of the eye from this point. The perfectly transparent air, and that absence of aërial vibration that characterizes the atmosphere of Arizona, conspire to invest all distance with magic illusion. Looking across the thirteen miles of the cañon's abyss from Bright Angel Trail, the opposite rim hardly seems farther away than the distance of three or four city blocks. Isis Temple is said to be as great in mass as the mountainous part of Mt. Washington, and the summit of Isis looks down six thousand feet into the depths of a chasm, the ledges on the side being "as impracticable as the face of Bunker Hill Monument."

It is a noticeable fact, and one which the general reader may regard with quiet amusement, that all the writers who even attempt to allude to the Grand Cañon

[1] In and Around the Grand Canyon, by George Wharton James. Little, Brown, and Co. 1900.

quote copiously from each other; and this is the almost inevitable instinct of each, in order to reinforce himself with authority for statements which, to those who have not themselves gazed upon this Carnival of the Gods, would sound incredible even to the verge of the wildest extravaganza. Major Powell's vivid transcription of his thrilling journey through the cañon, sailing through the boiling, rushing river whose torrents constantly threatened to engulf his boats, — Major Powell's transcription stands for itself alone; it was not only the pictured scenes of a writer, but the scientific report of an official government explorer; but since this, — and from Major Powell's narrative every writer invariably quotes, — since this, the writers quote from each other; they use each other's statements as evidence which they cite in order to support their own statements regarding a marvel so unspeakably phenomenal that the most literal and statistical description reads like an Arabian Nights romance. Then, too, the array of pen-pictures is interesting. A writer who coined wonderful descriptive phrases is Mr. C. A. Higgins. Of the silent transformations of the cañon when it "sinks into mysterious purple shadow" he said: "The far Shinumo Altar is tipped with a golden ray, and against a leaden horizon the long line of the Echo Cliffs reflects a soft brilliance of indescribable beauty, a light that, elsewhere, surely never was on sea or land. Then darkness falls," he continues, "and should there be a moon, the scene in part

revives in silver light a thousand spectral forms projected from inscrutable gloom; dreams of mountains, as in their sleep they brood on things eternal." Others who have written of the Grand Cañon are: Harriet Monroe, whose poet's pen is dipped in the colors of an artist's palette; George Wharton James; and Mr. Charles S. Gleed, a distinguished lawyer of Topeka, who thus described the Cañon's wonders:

"Surrendering our minds to the magic spell of that mighty chasm, what pictures troop before us! Yonder see Gibraltar, giant sentinel of the Mediterranean. There on long ledges are St. Peter's and St. Paul's, Niagara, the Pyramids, and the Tower of Pisa. Bracketed beyond are the great parliament houses of the world. Down below behold in life size the lesser mountains of our own land, — Washington, Monadnock, Mansfield, Lookout, and a thousand others. See in the distance a million colored pictures of the Alps, the Adirondacks, and the Sierras. On endless shelves, this way and that, behold the temples and cathedrals, the castles and fortresses of all time. See vast armies, the armies of the ages, winding up the slopes, and great navies manœuvring in the mirage-like distance. Here, indeed, the giant mind of Dante would have found new worlds to conquer; and Homer would have dreamed new dreams of gods and men, love and war, life and death, heaven and hell."

Hamlin Garland, in one of his prose-poems, has said:

"The clouds and the sunset, the moonrise and the storm, will transform it into a splendor no mountain range can surpass.

Peaks will shift and glow, walls darken, crags take fire, and gray-green mesas, dimly seen, take on the gleam of opalescent lakes of mountain water. The traveller who goes out to the edge and peers into the great abyss sees but one phase out of hundreds. If he is fortunate, it may be one of its most beautiful combinations of color and shadow. But to know it, to feel its majesty, one should camp in the bottom and watch the sunset and the moonrise while the river marches from its lair like an angry lion."

Robert Brewster Stanton, a civil engineer whose original work has brought him prominently before the scientific world, followed Major Powell's explorations, twenty years later, with a surveying company of his own organization, — and Mr. Stanton is, indeed, the only explorer who has made the continuous journey the entire length of the Colorado River which Major Powell navigated for a thousand miles. It was in May of 1889 that Mr. Stanton and his men initiated this daring feat, and of one phase of the appearance of the cañon Mr. Stanton's glowing, eloquent pen recorded:

"Those terrifying, frowning walls *are moving, are changing!* A new light is not only creeping over them, but is coming out from their very shadows. See those flattened slopes above the dark sandstone on top the granite; even at this very moment they are *being colored* in gorgeous stripes of horizontal layers of yellow, brown, white, green, and purple.

"What means this wondrous change? Wherein lies this secret of the great cañon?

"After living in it and with it for so many weeks and months, I lost all thought of the great chasm as being only a huge rock mass, carved into its many intricate forms by ages of erosion. It became to me what it has ever since remained, and what it really is, — a living, moving, sentient being!

"The Grand Cañon is not a solitude. It is a living, moving, pulsating being, ever changing in form and color, pinnacles and towers springing into being out of unseen depths. From dark shades of brown and black, scarlet flames suddenly flash out and then die away into stretches of orange and purple. How can such a shifting, animated glory be called 'a thing'? It is a being, and among its upper battlements, its temples, its amphitheatres, its cathedral spires, its monuments and its domes, and in the deeper recesses of its inner gorge its spirit, its soul, the very spirit of the living God himself, lives and moves and has its being."

Mr. C. M. Skinner, of the "Brooklyn Eagle," impressively wrote:

". . . After the sky colors, too, have faded, you are about to turn away, lingering, regretting, when — again, a wonder; for new colors, deep, tender, solemn, flow up along the painted walls, as night brims out of the deep. The bottom grows vague and misty, but each Walhalla is steeped in

purple as soft as the bloom of grapes. When day is wholly gone and the cañon has become to the eye a mere feeling or impression of depth and space, walk out on some lonely point. The slopes, thirteen miles away, are visible as gray walls, distinct from the black cliffs, and on the hither side the trees are clear against the snow. No night is absolute in blackness, but as we look it seems as though the cañon was lighted from within. It is an abyss of shadow and mystery. There is a sadness in the cañon, as in all great things of nature, that removes it from human experience. We have seen the utmost of the world's sublimity, and life is fuller from that hour."

All these and many other transcriptions of its glory form a picture gallery which each lover of the Grand Cañon prizes as among his choicest possessions. Thomas Moran, the artist, has painted many scenes from the cañon, one of these paintings having been placed in the Capitol in Washington, where it is the object of the admiration and the wonder of the endless procession of visitors who throng the nation's centre. Painter and poet and prophet make their pilgrimages to this one stupendous Marvel of Nature. To the prophets and the poets of every century and every age it flashes its responsive message; and the worshipper at the shrine of this Infinite Beauty, this sublimest Majesty, can but feel, with Mr. Higgins, — that poetic lover of the vast Southwest, the lover of music and literature and art and nature,

whose beautiful life on earth closed in 1900, but whose charm of presence still pervades the scenes he loved and memorialized, — with this lofty and poetic recorder of nature one can but say of the Grand Cañon: "Never was picture more harmonious, never flower more exquisitely beautiful. It flashes instant communication of all that architecture and painting and music for a thousand years have gropingly striven to express. It is the soul of Michael Angelo and of Beethoven."

In retrospective glance over a very midsummer night's dream of the ineffable glory and beauty of wanderings from Pike's Peak to the Pacific there stands out to the mental vision one treasured possession whose loveliness exceeds that of all scenic landscape; which is more luminous and crystal clear than the luminous atmosphere of beautiful Colorado or glowing Arizona; which is more enduring in its changelessness than even the Petrified Forests or the mighty precipices of the Grand Cañon; which is invested with all the etherial splendor of that brilliant young city which the Spanish conquerors knew as *Pueblo de la Reine de los Angeles:* which is as sacred in its nature as are the sacred legends of the Holy Faith of St. Francis. This treasured possession is that of the friendships formed during this enchanted journey; of the generous kindness, the bountiful hospitality; the exquisite courtesy and grace constantly received from each and all

with an unfailing uniformity, including those in widely varying relations and pursuits; those who, according to outer standards, are the more, or the less, fortunate in power, resources, or development, — the treasured possession of all this sweet and gracious friendliness is imperishable; and in this priceless and precious gift, which is not only a treasure for the life that now is, but also for the life which is to come, is there crystallized all the charm of summer wanderings in the Land of Enchantment.

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